



CDC® CYBER 18 PROCESSOR WITH MOS MEMORY

AA132, AA133, AA153, AA155

**DIAGRAMS
PARTS DATA
WIRE LISTS**

FIELD PRINT PACKAGE MANUAL

REVISION RECORD

REVISION	DESCRIPTION
A (2/83)	Manual released class A. This manual supersedes field print packages 96752366 (AA132-C) and 96751654 (AA133-B) which are obsolete.
B (10/83)	Manual revised; includes ECO DSO 22294, providing a new memory interface/address PWA to correct artwork errors.

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or use Comment Sheet in
the back of this manual.

MANUAL TO EQUIPMENT LEVEL CORRELATION SHEET

This manual reflects the equipment configurations listed below.

EXPLANATION: Locate the equipment type and series number, as shown on the equipment FCO log, in the list below. Immediately to the right of the series number is an FCO number. If that number and all of the numbers underneath it match all of the numbers on the equipment FCO log, then this manual accurately reflects the equipment.

EQUIPMENT TYPE	SERIES	WITH FCOs	COMMENTS
AA132-A	12		
AA132-B	11		
AA132-C	11		
AA132-D	03		
AA133-A	18		
AA133-B	13		
AA153-A	07		
AA155-B	04		

LIST OF EFFECTIVE PAGES

New features, as well as changes, deletions, and additions to information in this manual, are indicated by bars in the margins or by a dot near the page number if the entire page is affected. A bar by the page number indicates pagination rather than content has changed.

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vii/viii	A								
ix	A								
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2-i	A								
2-1 thru 2-54	A								
3-i thru 3-iv	A								
3-1 thru 3-50	A								
4-i	A								
4-1 thru 4-28	A								
5-i	A								
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A-2	A								
Comment Sheet	A								
Cover	—								

PREFACE

This manual contains logic diagrams, parts data and wire lists necessary to maintain the Control Data® AA132, AA133, AA153 and AA155 basic micro-programmable processors. Although intended primarily to support those processors used in the CYBER 18 product line, this manual is also applicable to various quoted special equipments (QSEs) which employ those basic processors.

This manual is organized into five sections: processor printed wiring assembly (PWA) logic diagrams; PWA assembly drawings and parts lists; processor assembly drawings and parts lists; cable drawings and wire lists; and processor backplane wire list. Appendix A provides a cross reference listing of integrated circuit (IC) generic numbers, CDC part numbers and NCR part numbers for those ICs used on the processor PWAs.

This manual contains multiple versions of some PWAs and processor assemblies. These multiple versions reflect minor structural or functional improvements that have been made to those items. When seeking information for an item, refer to the CDC part number to locate the applicable drawings in this manual. Only the PWAs and assemblies which comprise the basic processor are covered by this manual. General descriptions, operating procedures and theory of operation for the processor are contained in the Basic Micro-Programmable Processor Hardware Reference/Maintenance Manual. Cabinet information and data related to processor options and peripheral subsystems are contained in other manuals.

The following publications may be useful in understanding and maintaining these processors.

<u>Publication</u>	<u>Publication Number</u>
AA132, AA133, AA153, DT120, FC402 CYBER 18 Computer Systems Central Processor Field Repair Guide	60475001
AA132, AA133, AA153, AA155, GH443, GH444, GH447, GH461, XA114, XA123, XA184 CYBER 18 Equipment Cabinets Hardware Reference/Maintenance Manual	96768280
AT241, AT275, BA212, DT223 MOS Memory Subsystem Hardware Reference/Maintenance Manual	96768600
BA209, BA210, BS158 512-, 2048-, 8192-Instruction Micro Memory Hardware Reference/Maintenance Manual	96767900
BR803 Flexible Disk Drive Hardware Maintenance Manual	77834769
Basic Micro-Programmable Processor Hardware Reference/Maintenance Manual	39451400
CYBER 18 Computer Systems with MOS Memory Installation Manual	96768360
DT120, DT195, FC402 Breakpoint Controller and Breakpoint Panel Hardware Reference/Maintenance Manual	96729000
DY192, DY198 CYBER 18-25/30 Communication Multiplexer Subsystem Hardware Reference/Maintenance Manual	96768610
FA730 Flexible Disk Drive Controller Hardware Reference/Maintenance Manual	96768800

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LOGIC DIAGRAMS

1



OPTIONAL CAPACITORS—
MOUNTING PADS PROVIDED ON
PWB.

NOTES: UNLESS OTHERWISE SPECIFIED

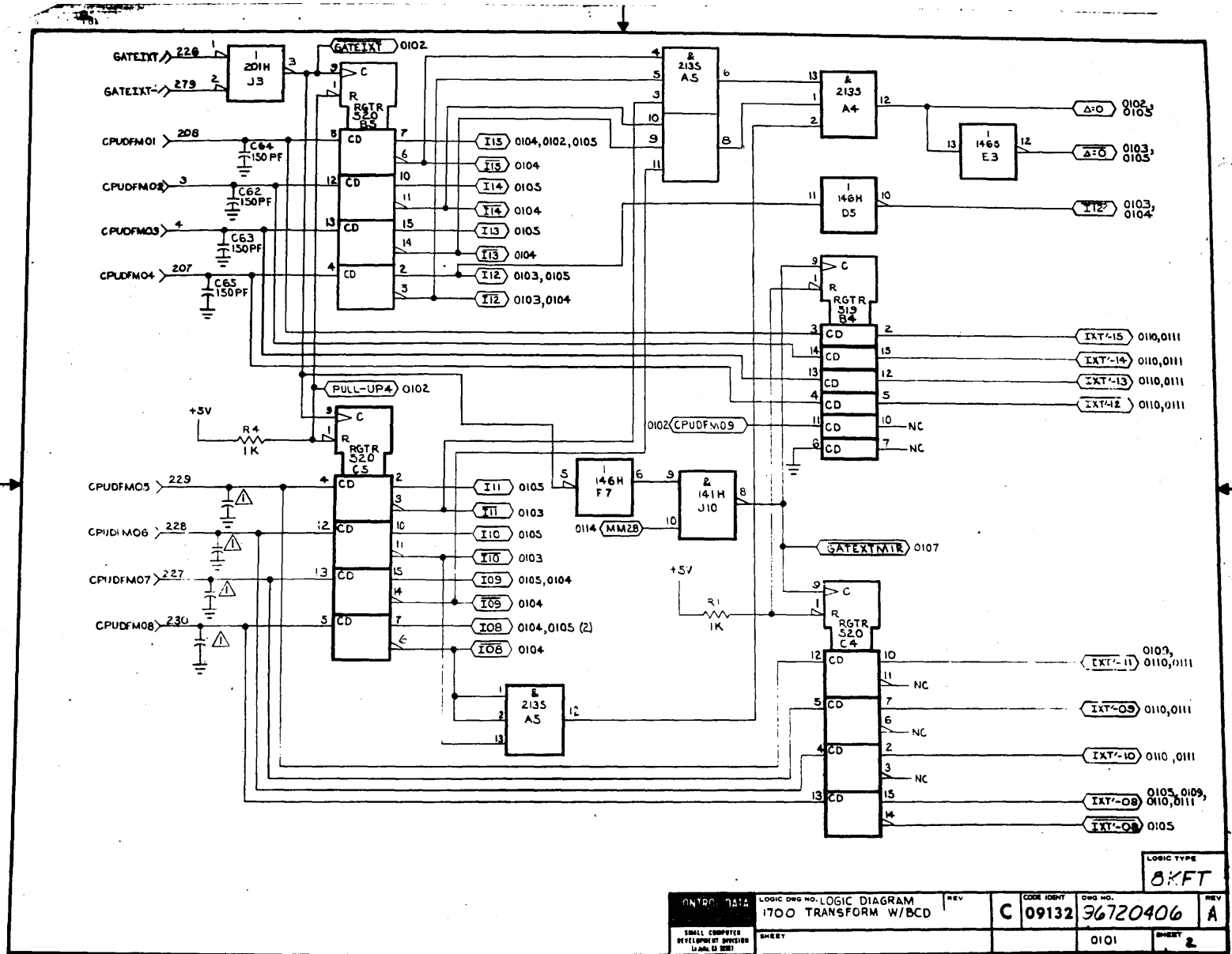
SIGNAL	PIN	CROSS REF NO.	SIGNAL	PIN	CROSS REF NO.	SIGNAL	PIN	CROSS REF NO.	SIGNAL	PIN	CROSS REF NO.
ALU00/	56	0106	CPUDFM11	203	0102	GND	101	0112	MM11	58	0113
ALU03/	57	0106	CPUDFM12	204	0102	GND	102	0112	MM12	63	0113
ALU04/	58	0106	CPUDFM13	297	0102	GND	237	0112	MM13	65	0113
ALU07/	55	0106	CPUDFM14	299	0102	GND	238	0112	MM14	66	0113
ALU08/	68	0106	CPUDFM15	300	0102	GND	239	0112	MM15	70	0113
ALU11/	69	0106	CPUDFM16	298	0102	GND	240	0112	MM16	40	0114
BLKM100/	266	0108	CPU-PR0T/	271	0108	GND	241	0112	MM17	41	0114
BTU00	18	0107				GND	251	0112	MM18	49	0114
BTU09	214	0107	DELTA00	211	0106	GND	252	0112	MM19	48	0114
BTU/	245	0107	DELTA01	7	0106	GND	260	0112	MM20	47	0114
BUS00	59	0112	DELTA02	209	0106	GND	261	0112	MM21	46	0114
BUS01	60	0112	DELTA03	6	0106	GND	301	0112	MM22	45	0114
BUS02	61	0112	DELTA04	8	0106	GND	302	0112	MM23	42	0114
BUS03	62	0112	DELTA05	212	0106				MM24	77	0114
BUS04	35	0112	DELTA06	210	0106	ILLCHAR0/	12	0106	MM25	78	0114
BUS05	43	0112	DELTA07	213	0106	ILLCHAR1/	217	0106	MM26	79	0114
BUS06	44	0112	DELTA08	223	0106	ILLCHAR2/	13	0106	MM27	80	0114
BUS07	34	0112	DELTA09	20	0106	ILLCHAR3/	218	0106	MM28	81	0114
BUS08	11	0112	DELTA10	21	0106	INDO0FF	294	0108	MM29	82	0114
BUS09	50	0112	DELTA11	220	0106				MM30	83	0114
BUS10	64	0112	DELTA12	221	0106	MA0/	231	0113	MM31	84	0114
BUS11	67	0112	DELTA13	224	0106	MA1/	257	0113	M0DE11/	270	0107
BUS12	75	0112	DELTA14	222	0106	MA2/	258	0113	MULTIND	73	0107
BUS13	76	0112	DELTA15	225	0106	MA3/	247	0113	PG0/	54	0112
BUS14	10	0112				MA4/	246	0113	PG1/	254	0112
BUS15	9	0112				MA5/	244	0113	PG2/	249	0112
CARRY0UT0	15	0106	ENMML	53	0112	MA6/	253	0113	PG3/	232	0113
CARRY0UT1	17	0106	ENMMLB/	268	0112	MA7/	255	0113	POWERFAIL/	286	0107
CARRY0UT2	14	0106	ENMMUB/	236	0112	MCDelayED/	267	0108	PROTECT/	245	0102
CARRY0UT3	216	0106	EVENPAR	74	0107	MEMPR0TBT/	274	0108			
CLRMIR	215	0107				MIR04-	219	0106	READCYCLE	264	0107
CPUDFM01	208	0101	GATEAB/	272	0108	MM00	28	0113	RPINTIG/	277	0107
CPUDFM02	2	0101	GATEXT/	226	0101	MM01	31	0113			
CPUDFM03	4	0101	GATEXT-/	279	0105	MM02	27	0113	SELGETMAK/	275	0108
CPUDFM04	217	0101	GATEMIR/	88	0107	MM03	26	0113	SELSKIP/	72	0108
CPUDFM05	219	0101	GETMAK/	87	0107	MM04	25	0113	SELST0P/	71	0108
CPUDFM06	229	0101	GND	29	0112	MM05	24	0113	SETSMIC06/	280	0108
CPUDFM07	227	0101	GNE	30	0112	MM06	23	0113	SETSMIC29/	278	0108
CPUDFM08	230	0101	GNE	32	0112	MM07	22	0113	SMIC05/	269	0107
CPUDFM09	206	0101	GND	33	0112	MM08	55	0113	SMI07	19	0106
CPUDMIO	205	0106	GNE	51	0112	MM09	56	0113	SM08	273	0107
			GNE	52	0112	MM C	57	01 3	SM111	16	0106

INTER-DIVISIONAL DOCUMENT
Changes to this document require
approval of all Using Divisions
per CDC-STD 1.01.024.

78170E10

DR 96720406	DETAILED LIST	A	B	C	D	E	F	LOGIC TITLE	CONTROL DATA	TITLE	CARD POS
	1								UNIT USED ON AA132-C	LOGIC DIAGRAM -	
	2								DATE 11-22-78	1700 TRANSFORM W/B CD	
	3								CHKD 11-22-78	LOGIC TYPE BKFT	
	4							LOGIC DWG NO.	ENGR 11-22-78		
	5							REV	MFC 11-22-78	CYBER 18 C	CODE IDENT NO. 96720406 B
	6							PWA NO. 96720404	APPRO 11-22-78	DRAWING NUMBER 96720406 B	REVIEW
							PWB NO. 96735600			SHEET 1 OF 13	

Figure 1-1. 1700 Transform (PWA 96720404) Logic Diagram (Sheet 2 of 16)



[illegible]

Figure 1-1. 1700 Transform (PWA 96720404) Logic Diagram (Sheet 9 of 16)

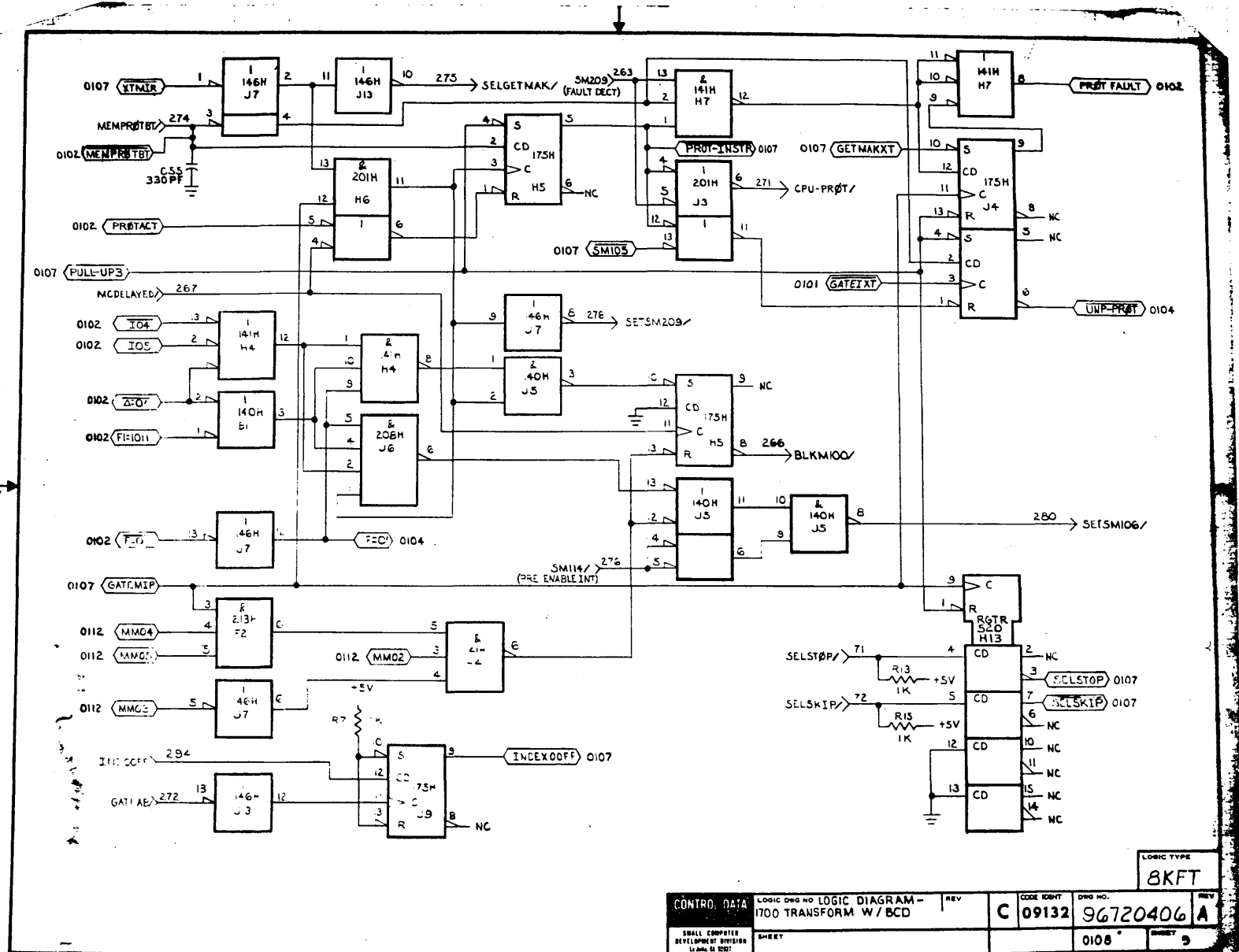
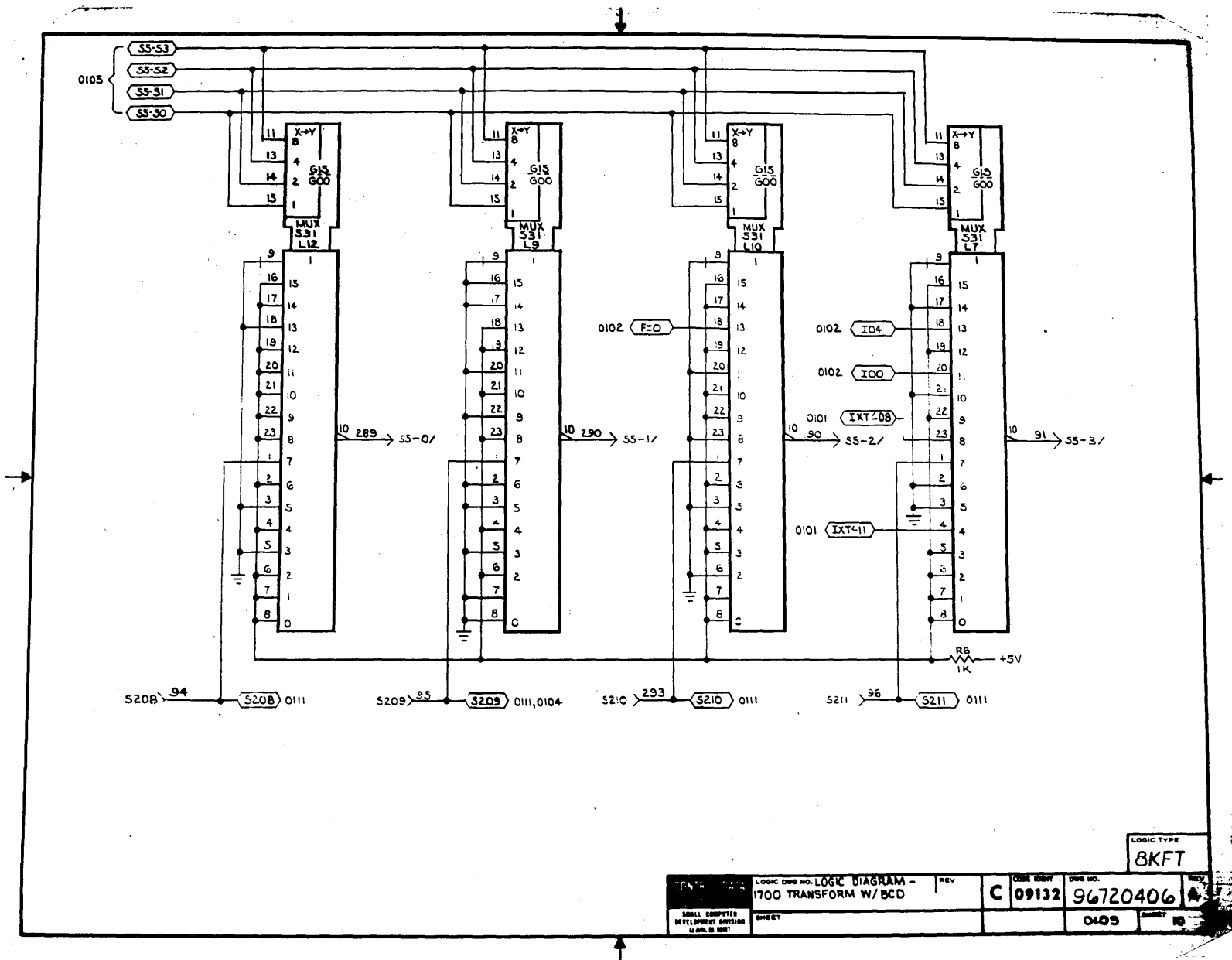


Figure 1-1. 1700 Transform (PWA 96720404) Logic Diagram (Sheet 10 of 16)



The diagram illustrates the internal logic of a 1700 Transform W/BCD, featuring eight 74181 ALU chips. Each chip is configured with specific inputs and outputs, and their interconnections are detailed. The inputs include S8-50, S8-51, S8-52, and S8-53, which are connected to the ALU chips. The outputs are S8-0 through S8-7, which are connected to the ALU chips. The diagram also shows various control signals like 0107, 0109, 0102, 0101, and 0110, and a logic type of 8KFT.

LOGIC TYPE	LOGIC DES NO.	LOGIC DIAGRAM -	REV	CODE IDENT	DWG NO.	REV
8KFT	09132	1700 TRANSFORM W/BCD		C	96720406	A
	0111	SHEET				12

The diagram illustrates the logic for a 1700 Transforms W/BCD circuit. It features four 3-to-8 line decoders (G1, G0, GC, G) and a 141H F9 flip-flop. The decoders are connected to memory modules (MM00-MM31) and buses (BUS00-BUS15). The flip-flop is connected to the decoders and the buses. The diagram also shows power supply connections (+5V, GND) and various resistors and capacitors.

Legend:

- MM00-MM31: Memory Modules
- BUS00-BUS15: Buses
- +5V: Power Supply
- GND: Ground
- 141H F9: Flip-Flop
- 141H F8: Flip-Flop
- RESISTORS: R12, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161, R162, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R231, R232, R233, R234, R235, R236, R237, R238, R239, R240, R241, R242, R243, R244, R245, R246, R247, R248, R249, R250, R251, R252, R253, R254, R255, R256, R257, R258, R259, R260, R261, R262, R263, R264, R265, R266, R267, R268, R269, R270, R271, R272, R273, R274, R275, R276, R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R296, R297, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R341, R342, R343, R344, R345, R346, R347, R348, R349, R350, R351, R352, R353, R354, R355, R356, R357, R358, R359, R360, R361, R362, R363, R364, R365, R366, R367, R368, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393, R394, R395, R396, R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R422, R423, R424, R425, R426, R427, R428, R429, R430, R431, R432, R433, R434, R435, R436, R437, R438, R439, R440, R441, R442, R443, R444, R445, R446, R447, R448, R449, R450, R451, R452, R453, R454, R455, R456, R457, R458, R459, R460, R461, R462, R463, R464, R465, R466, R467, R468, R469, R470, R471, R472, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490, R491, R492, R493, R494, R495, R496, R497, R498, R499, R500, R501, R502, R503, R504, R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515, R516, R517, R518, R519, R520, R521, R522, R523, R524, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R536, R537, R538, R539, R540, R541, R542, R543, R544, R545, R546, R547, R548, R549, R550, R551, R552, R553, R554, R555, R556, R557, R558, R559, R560, R561, R562, R563, R564, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R583, R584, R585, R586, R587, R588, R589, R590, R591, R592, R593, R594, R595, R596, R597, R598, R599, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660, R661, R662, R663, R664, R665, R666, R667, R668, R669, R670, R671, R672, R673, R674, R675, R676, R677, R678, R679, R680, R681, R682, R683, R684, R685, R686, R687, R688, R689, R690, R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R749, R750, R751, R752, R753, R754, R755, R756, R757, R758, R759, R760, R761, R762, R763, R764, R765, R766, R767, R768, R769, R770, R771, R772, R773, R774, R775, R77

Figure 1-1. 1700 Transform (PWA 96720404). Logic Diagram (Sheet 14 of 16)

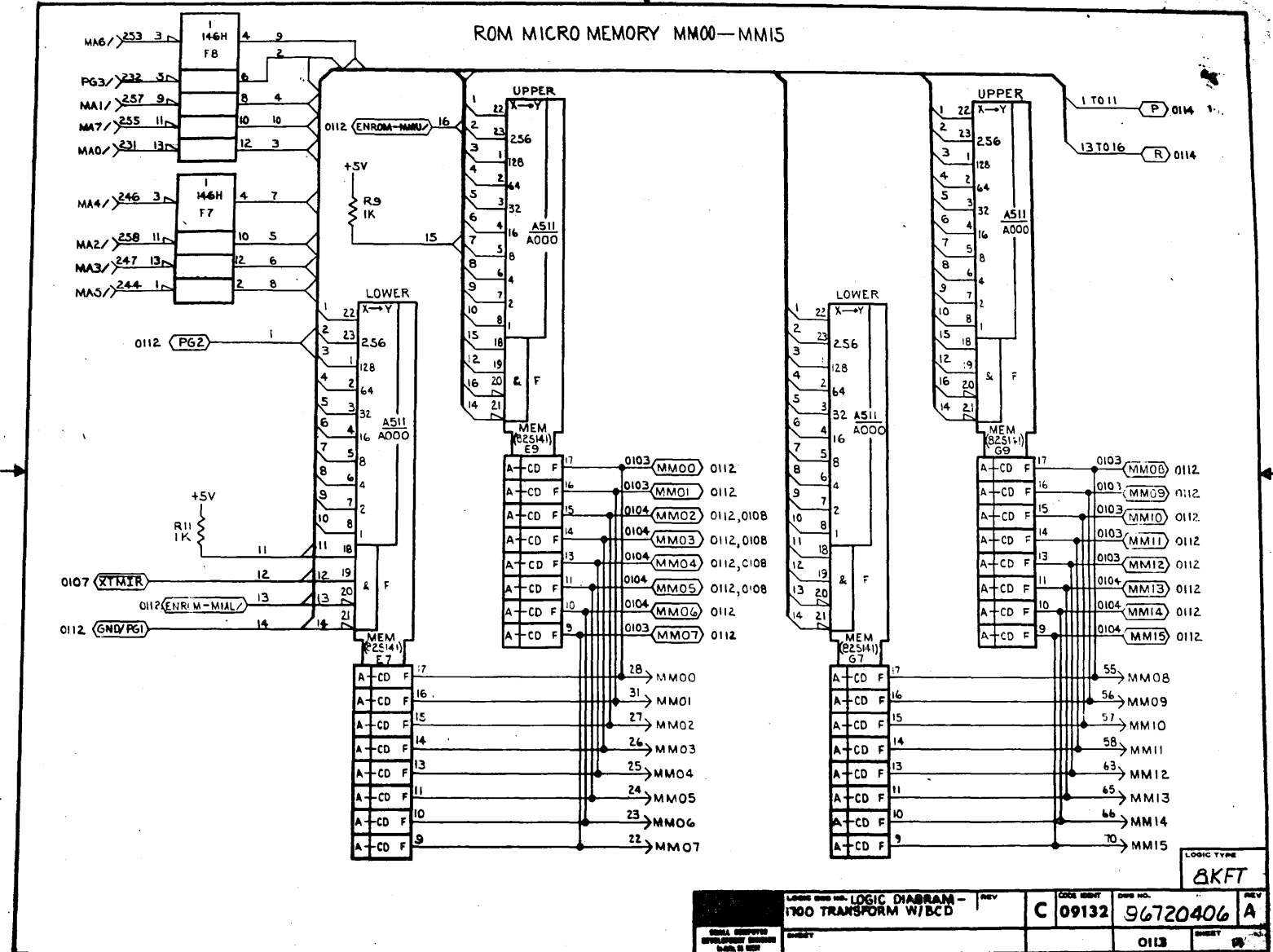


Figure 1-1. 1700 Transform (PWA 96720404) Logic Diagram (Sheet 15 of 16)

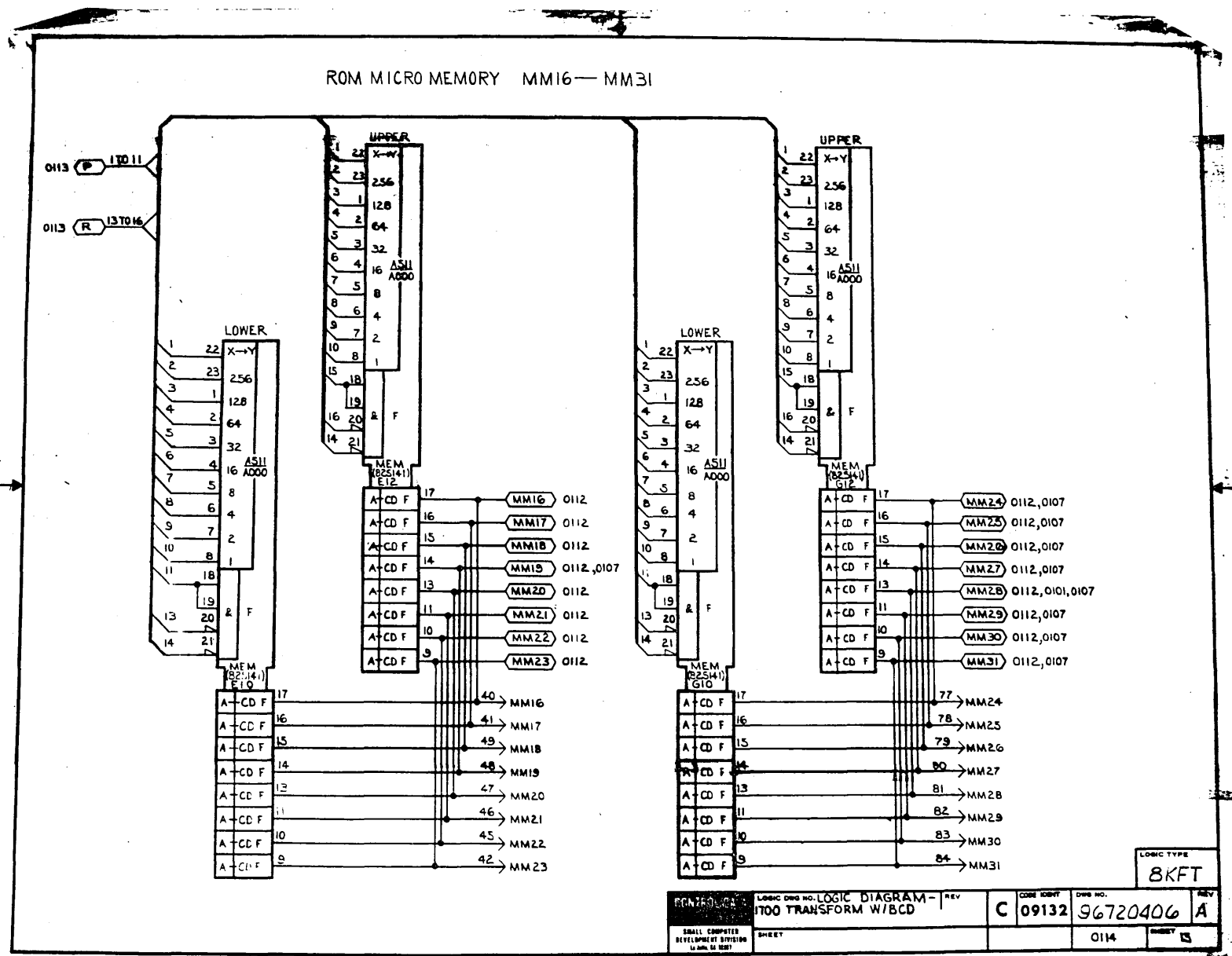


Figure 1-2. 1/00 Transform (PWAs 96735700 and 96837727) Logic Diagram (Sheet 1 of 16)

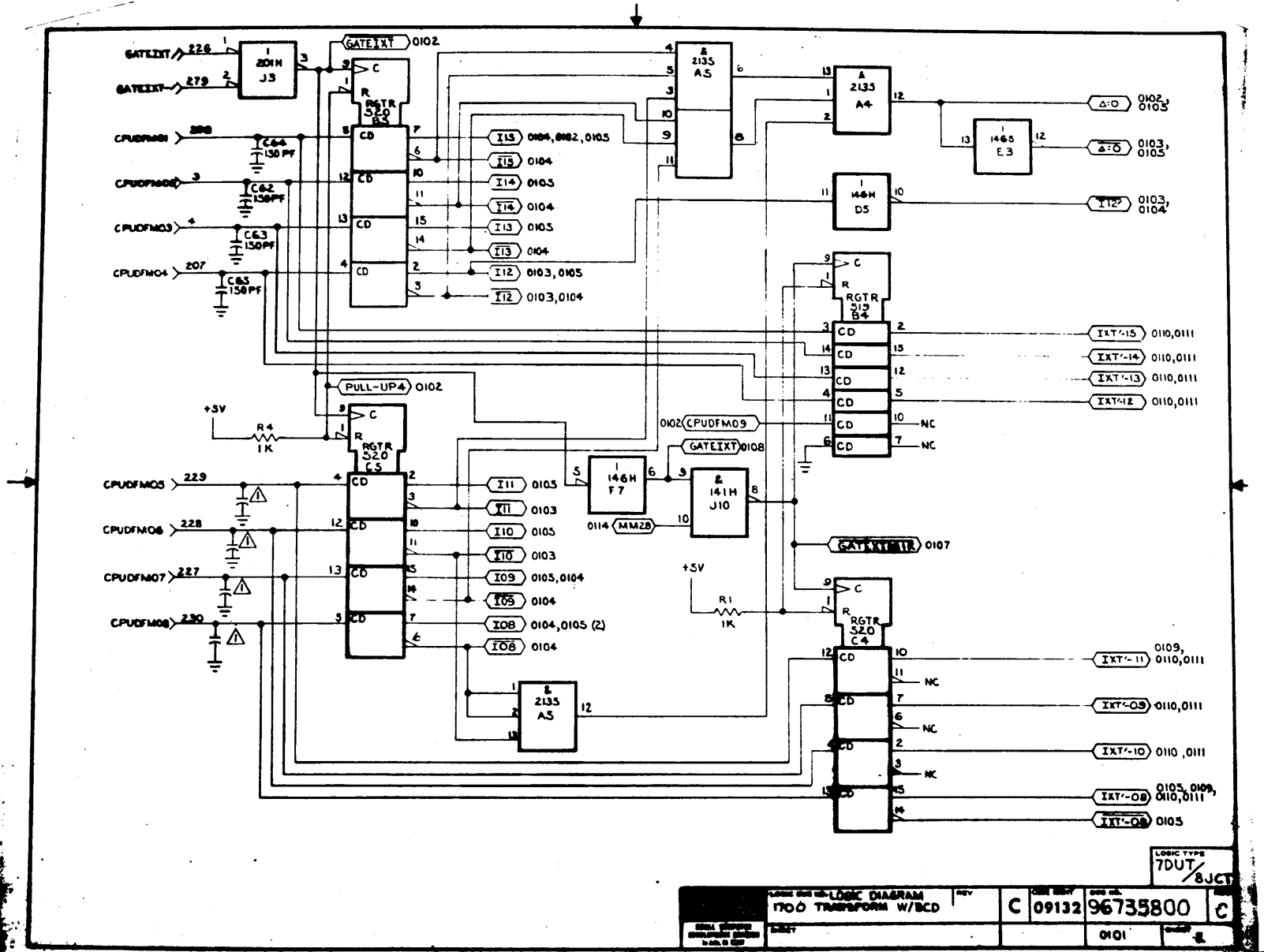
SIGNAL	PIN	CROSS REF NO	SIGNAL	PIN	CROSS REF NO	SIGNAL	PIN	CROSS REF NO	SIGNAL	PIN	CROSS REF NO
ALU00/	36	0106	CPUDFM11	203	0102	GND	101	0112	MM11	58	0113
ALU03/	37	0106	CPUDFM12	204	0102	GND	102	0112	MM12	63	0113
ALU04/	38	0106	CPUDFM13	297	0102	GND	237	0112	MM13	65	0113
ALU07/	35	0106	CPUDFM14	299	0102	GND	238	0112	MM14	66	0113
ALU08/	68	0106	CPUDFM15	300	0102	GND	239	0112	MM15	70	0113
ALU11/	69	0106	CPUDFM16	298	0102	GND	240	0112	MM16	67	0114
BLKMI00/	246	0108	CPU-PR0T/	271	0108	GND	241	0112	MM17	41	0114
BTUG0	18	0107				GND	251	0112	MM18	39	0114
BTU09	214	0107	DELTA00	211	0106	GND	252	0112	MM19	45	0114
BTU/	225	0107	DELTA01	7	0106	GND	260	0112	MM20	47	0114
BUS00	59	0112	DELTA02	209	0106	GND	261	0112	MM21	47	0114
BUS01	60	0112	DELTA03	6	0106	GND	301	0112	MM22	45	0114
BUS02	61	0112	DELTA04	8	0106	GND	302	0112	MM23	43	0114
BUS03	62	0112	DELTA05	212	0106				MM24	37	0114
BUS04	35	0112	DELTA06	210	0106	ILLCHAR0/	2	0106	MM25	78	0114
BUS05	43	0112	DELTA07	213	0106	ILLCHAR1/	217	0106	MM26	79	0114
BUS06	44	0112	DELTA08	223	0106	ILLCHAR2/	13	0106	MM27	80	0114
BUS07	34	0112	DELTA09	20	0106	ILLCHAR3/	218	0106	MM28	81	0114
BUS08	11	0112	DELTA10	21	0106	INDO0FF	294	0108	MM29	82	0114
BUS09	50	0112	DELTA11	220	0106				MM30	83	0114
BUS10	64	0112	DELTA12	221	0106	MA0/	231	0113	MM31	84	0114
BUS11	67	0112	DELTA13	224	0106	MA1/	257	0113	M0DE11/	270	0107
BUS12	75	0112	DELTA14	222	0106	MA2/	258	0113	MULT:ND	73	0107
BUS13	76	0112	DELTA15	225	0106	MA3/	247	0113	PG0/	54	0112
BUS14	10	0112				MA4/	246	0113	PG1/	254	0112
BUS15	9	0112				MA5/	244	0113	PG2/	249	0112
			ENMML	53	0112	MA6/	253	0113	PG3/	232	0113
CARRYOUT0	15	0106	ENMMLB/	268	0112	MA7/	255	0113	POWERFAIL/	286	0107
CARRYOUT1	17	0106	ENMMU	256	0112	MCDELAYD/	267	0108	PROTECT/	245	0102
CARRYOUT2	14	0106	ENMMUB/	236	0112	MEMPROTBT/	274	0108			
CARRYOUT3	216	0106	EVENPAR	74	0107	MIR04-	219	0106	READYCYCLE	264	0107
CLRMIR	215	0107				MM00	28	0113	RPINTIG/	277	0107
CPUDFM01	208	0107	GATEAB/	272	0108	MM01	31	0113			
CPUDFM02	3	0101	GATEIXT/	226	0101	MM02	27	0113	SELGETMAX/	275	0108
CPUDFM03	4	0101	GATEIXT-/	279	0101	MM03	26	0113	SELSKIP/	72	0108
CPUDFM04	207	0101	GATEMIR/	68	0107	MM04	25	0113	SELSTOP/	71	0108
CPUDFM05	229	0101	GETMAX/	87	0107	MM05	24	0113	SETSM106/	280	0108
CPUDFM06	228	0101	GND	29	0112	MM06	23	0113	SETSM209/	278	0108
CPUDFM07	227	0101	GND	30	0112	MM07	22	0113	SM105/	269	0107
CPUDFM08	230										

— INACTIVE —
REPLACED BY NONE
ER 6-1-79

INTRO-OFFICIAL DOCUMENT
Changes to this document require
approval of all Acting Directors
per CSC-810 1.5.A.2.1.

OPTIONAL CAPACITORS— MOUNTING PADS PROVIDED ON PWB. NOTES: UNLESS OTHERWISE SPECIFIED	DR 96735800 DETACHED LIST	A	B	C	D	E	F	LOGIC TITLE	SMALL COMPUTER DEVELOPMENT DIVISION JAN 68 1007 TITLE LOGIC DIAGRAM - 1700 TRANSFORM W/BCD LOGIC TYPE 7DUT/8CT CARD POS	
		1								
		2								
		3								
		4								
		5								
		6								
		7								
							LOGIC CHIC NO	FIRST USED ON DR D. LINVILLE 11-17-77 CHK 10/21/77 ENGR 11/21/77 WPC APPRO 11-21-77	LOGIC TYPE 7DUT/8CT CYBER 18 C CORE COUNT NO. 09132 SHIPPING CONTAINER 96735800 REV E SHEET 1 OF 15	
							PART NO. 96735700 PWB NO. 96737727 PWB NO. 96735600			

Figure 1-2. 1700 Transform (PMAs 96735700 and 96837727) Logic Diagram (Sheet 2 of 16)



[illegible]

Figure 1-2. 1700 Transform (WAS 96735700 and 96837727) Logic Diagram (Sheet 7 of 16)

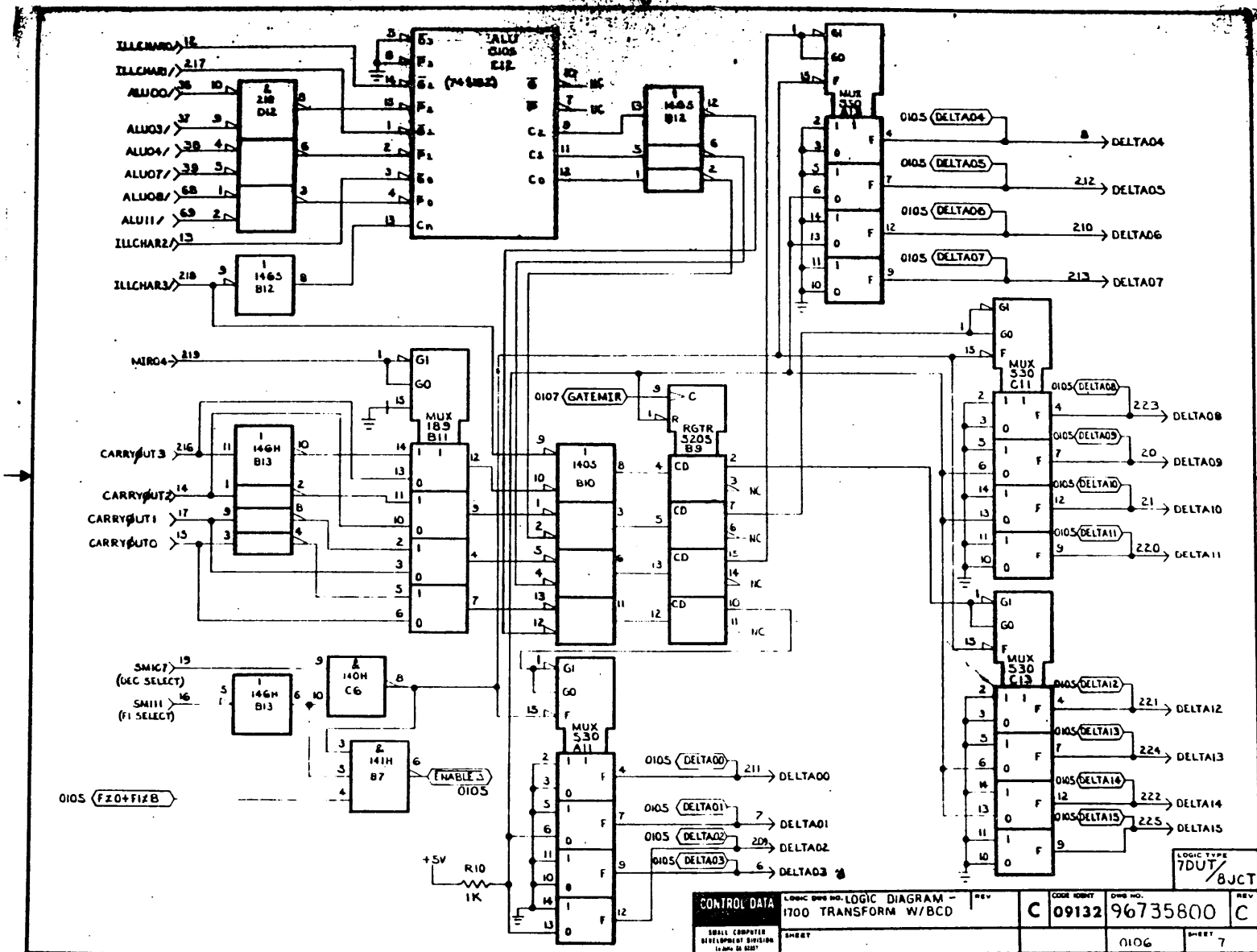


Figure 1-2. 1700 Transform (PNAs 96735700 and 96837727) Logic Diagram (Sheet 8 of 16)

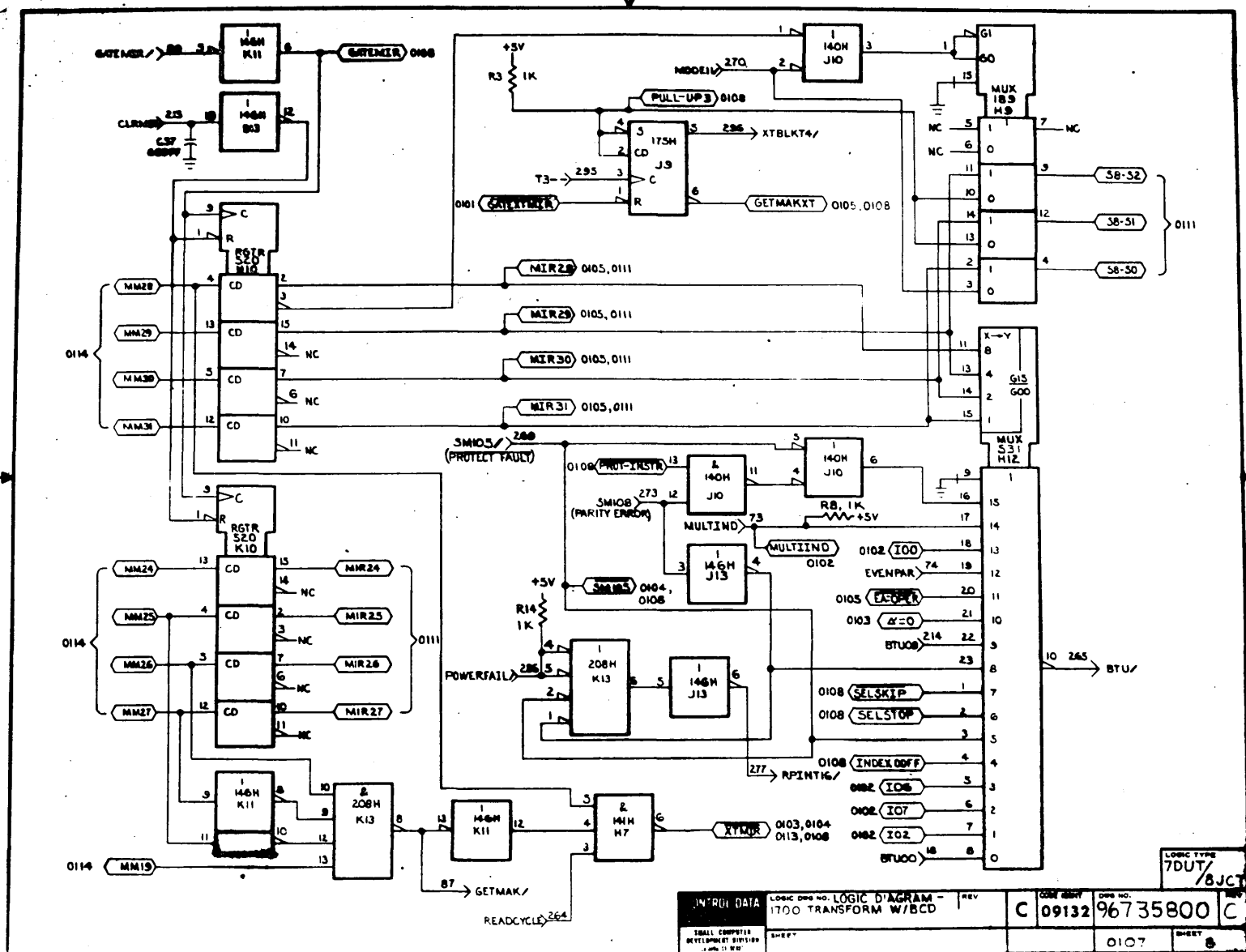


Figure 1-2. 1700 Transform (PWAs 96735700 and 96837727) Logic Diagram (Sheet 10 of 16)

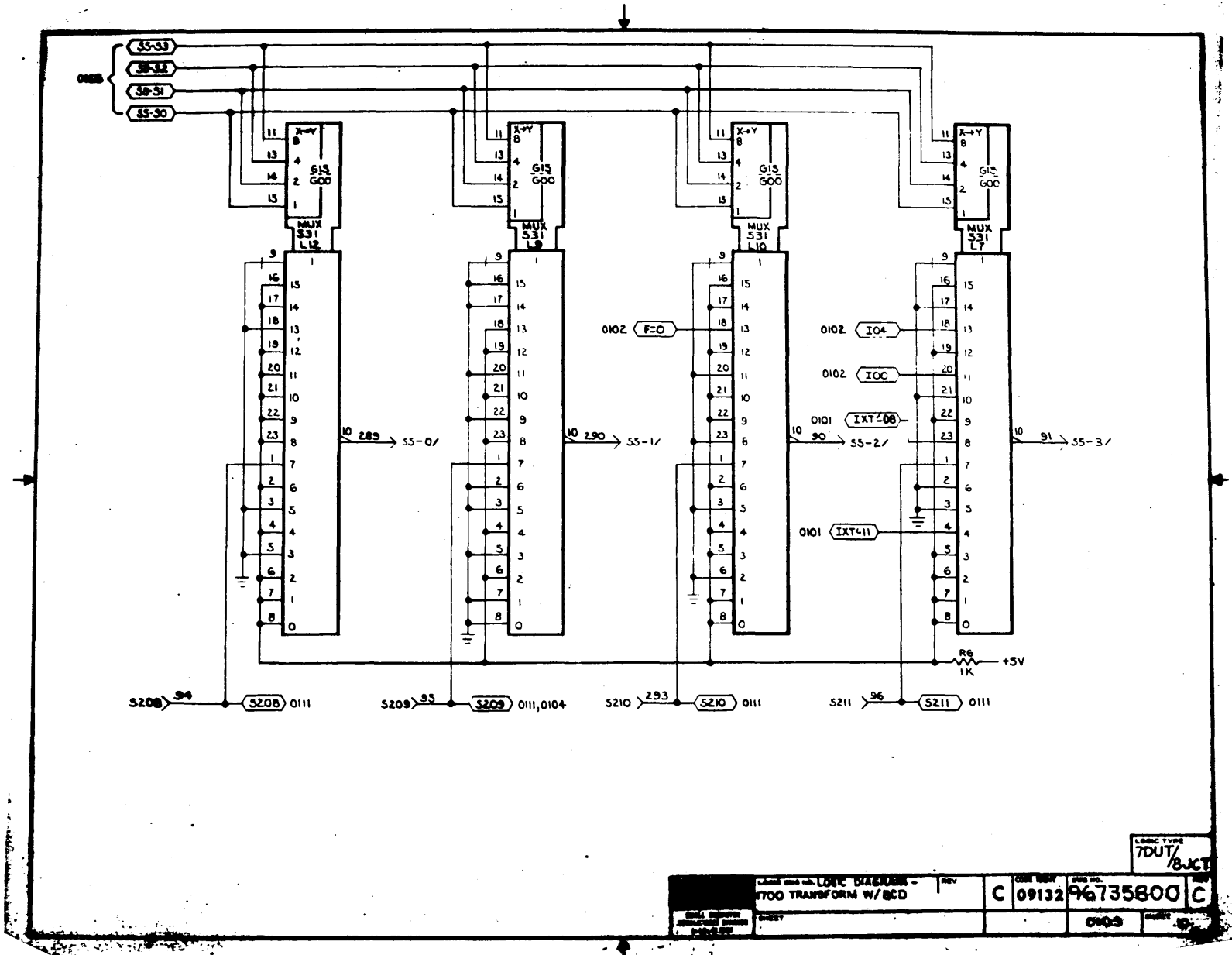


Figure 1-2. 1700 Transform (PMAs 96735700 and 96837727) Logic Diagram (Sheet 11 of 16)

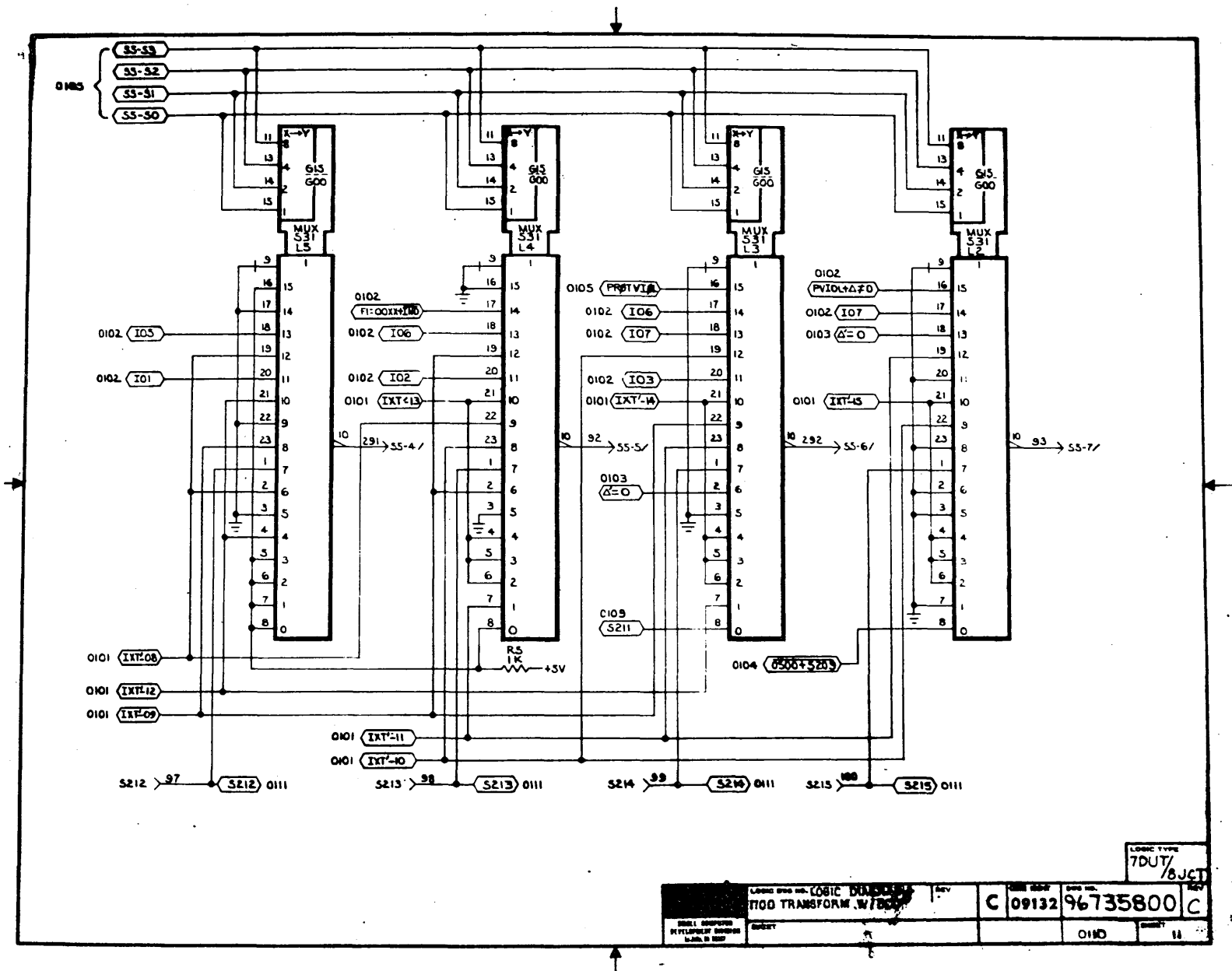


Figure 1-2. 1700 Transform (PMAs 96735700 and 96837727) Logic Diagram (Sheet 13 of 16)

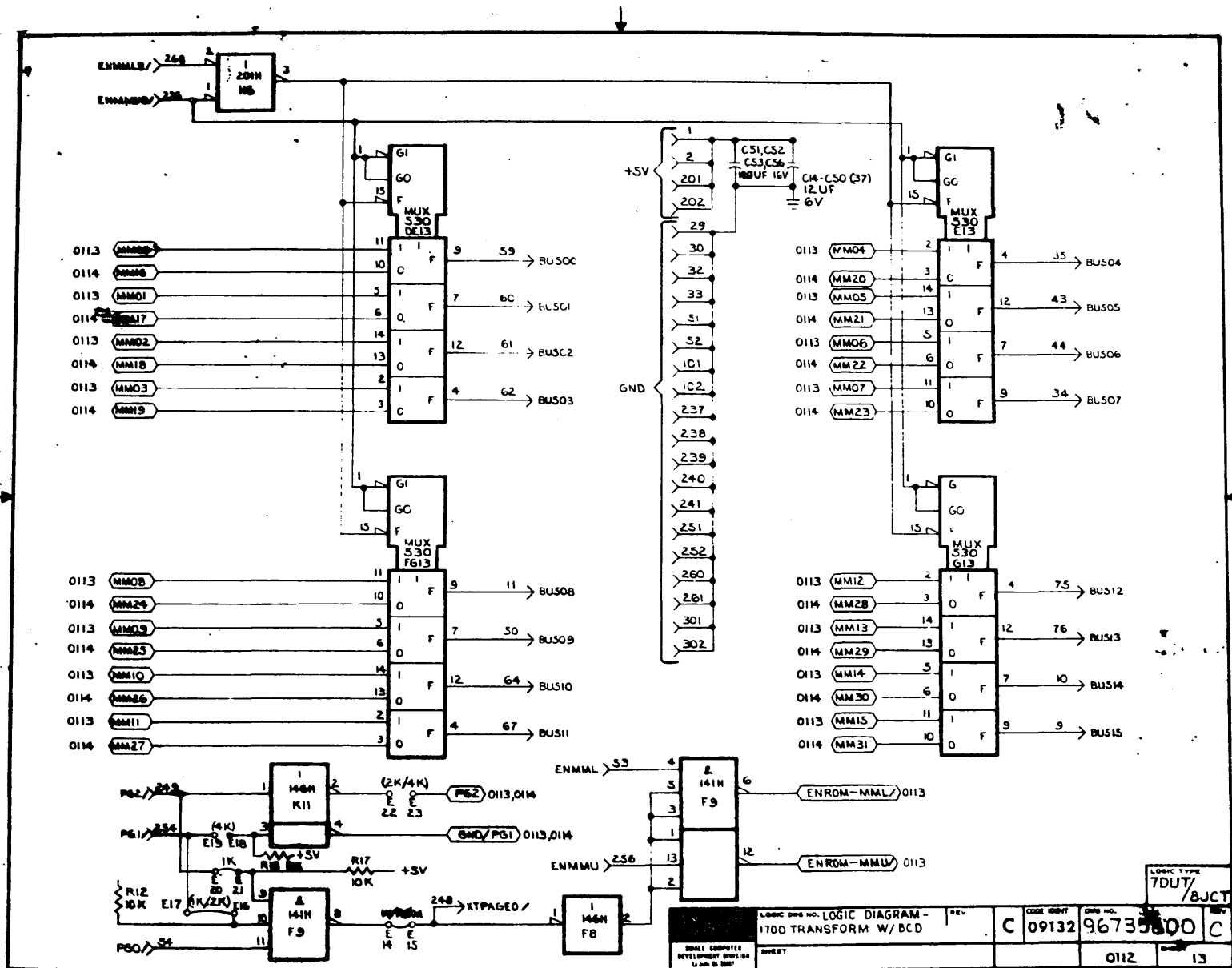


Figure 1-2. 1700 Transform (PMAs 96735700 and 96837727) Logic Diagram (Sheet 16 of 16)

2M(TD)

DWN	JSHUMPHREYS	11-28-77	CONTROL DATA	TITLE	LOGIC DIAGRAM — (TDUT/BJCT)	PREFIX	DOCUMENT NO.	REV.
CHKD	<i>In Brn</i>	11-28-77			1700 TRANSFORM W/ BCD	DR	96735800	E
ENG	<i>S. Whitaker</i>	11-28-77	DATA SYSTEMS	FIRST USED ON			SHEET	1 OF 1
MFG			LAJOLLA DIVISION					
APPR	<i>A. Webb</i>	12-1-77	CODE IDENT		CYBER 18			
			09132					

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP										
A	DS20108	CL A RELEASED	JSH	12-1-77	AW										
B	DS21084	SEE ECO	DL	3-29-78	AW										
C	DS21210	SEE ECO	RJR	9-28-78	AW										
D	DS21395	- INACTIVE -	BR	6-6-79	AW										
E	DS21664	REV UPDATE	BR	7-16-79	AW										
- INACTIVE - REPLACED BY NONE BR 5-31-79															

NOTES:	INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.	DETACHED LISTS
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AA2100 REV. 8/71 AA6030 TD PRINTED IN U.S.A.

Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 1 of 19)

(25.4mm) 1 INCH					DETACHED REVISIONS					315-0536975 96752604																																																																																																																																																																																																																																																																																																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>FUNCTION</th> <th>INPUT PIN</th> <th>OUTPUT PIN</th> <th>PAGE/ZONE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td>BLKMI00/</td><td></td><td>266</td><td>12-D4</td><td></td></tr> <tr><td>BTU/</td><td></td><td>265</td><td>12-B1</td><td></td></tr> <tr><td>BTU00</td><td>18</td><td></td><td>12-C3</td><td></td></tr> <tr><td>BTU09</td><td>214</td><td></td><td>12-B3</td><td></td></tr> <tr><td>BUS00</td><td></td><td>59</td><td>16-D4</td><td></td></tr> <tr><td>BUS01</td><td></td><td>60</td><td>16-D4</td><td></td></tr> <tr><td>BUS02</td><td></td><td>61</td><td>16-D4</td><td></td></tr> <tr><td>BUS03</td><td></td><td>62</td><td>16-C4</td><td></td></tr> <tr><td>BUS04</td><td></td><td>35</td><td>16-B4</td><td></td></tr> <tr><td>BUS05</td><td></td><td>43</td><td>16-B4</td><td></td></tr> <tr><td>BUS06</td><td></td><td>44</td><td>16-B4</td><td></td></tr> <tr><td>BUS07</td><td></td><td>34</td><td>16-C4</td><td></td></tr> <tr><td>BUS08</td><td></td><td>11</td><td>16-D1</td><td></td></tr> <tr><td>BUS09</td><td></td><td>50</td><td>16-D1</td><td></td></tr> <tr><td>BUS10</td><td></td><td>64</td><td>16-D1</td><td></td></tr> <tr><td>BUS11</td><td></td><td>67</td><td>16-C1</td><td></td></tr> <tr><td>BUS12</td><td></td><td>75</td><td>16-B1</td><td></td></tr> <tr><td>BUS13</td><td></td><td>76</td><td>16-B1</td><td></td></tr> <tr><td>BUS14</td><td></td><td>10</td><td>16-B1</td><td></td></tr> <tr><td>BUS15</td><td></td><td>9</td><td>16-C1</td><td></td></tr> </tbody> </table>					FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS	BLKMI00/		266	12-D4		BTU/		265	12-B1		BTU00	18		12-C3		BTU09	214		12-B3		BUS00		59	16-D4		BUS01		60	16-D4		BUS02		61	16-D4		BUS03		62	16-C4		BUS04		35	16-B4		BUS05		43	16-B4		BUS06		44	16-B4		BUS07		34	16-C4		BUS08		11	16-D1		BUS09		50	16-D1		BUS10		64	16-D1		BUS11		67	16-C1		BUS12		75	16-B1		BUS13		76	16-B1		BUS14		10	16-B1		BUS15		9	16-C1		<table border="1" style="width: 100%; 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FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS																																																																																																																																																																																																																																																																																																																											
DELTA13		224	11-B1																																																																																																																																																																																																																																																																																																																												
DELTA14		222	11-B1																																																																																																																																																																																																																																																																																																																												
DELTA15		225	11-B1																																																																																																																																																																																																																																																																																																																												
DFM01	208		6-B8, 6-D3																																																																																																																																																																																																																																																																																																																												
DFM02	3		6-B8, 6-C3																																																																																																																																																																																																																																																																																																																												
DFM03	4		6-B8, 6-C3																																																																																																																																																																																																																																																																																																																												
DFM04	207		6-A8, 6-D3																																																																																																																																																																																																																																																																																																																												
DFM05	229		6-C8, 6-C5																																																																																																																																																																																																																																																																																																																												
DFM06	228		6-D8, 6-D5																																																																																																																																																																																																																																																																																																																												
DFM07	227		6-C8, 6-D5																																																																																																																																																																																																																																																																																																																												
DFM08	230		6-D8, 6-C5																																																																																																																																																																																																																																																																																																																												
DFM09	206		5-C8, 6-C3																																																																																																																																																																																																																																																																																																																												
DFM10	205		5-C8																																																																																																																																																																																																																																																																																																																												
DFM11	203		5-D8																																																																																																																																																																																																																																																																																																																												
DFM12	204		5-D8																																																																																																																																																																																																																																																																																																																												
DFM13	297		5-A8																																																																																																																																																																																																																																																																																																																												
DFM14	299		5-B8																																																																																																																																																																																																																																																																																																																												
DFM15	300		5-B8																																																																																																																																																																																																																																																																																																																												
DFM16	298		5-B8																																																																																																																																																																																																																																																																																																																												
3. FILTER CAPACITOR REF DESIGNATOR: C14 THRU C53. 2. +5 VOLT PINS: 1, 2, 201, 202. 1. GROUND PINS: 51, 52, 101, 102, 251, 252, 301, 302. NOTES (UNLESS OTHERWISE SPECIFIED)					5. REFERENCE DESIGNATIONS NOT USED: A1, A8, A11, B8, B11, C8, C11, D8, D11, DE1 THRU DE12, E11, F61 THRU F612, G1, G8, G11, H1, H8, H11, J1, J8, J11, J12, K8, L1, L6, L8, L11. 4. HIGHEST REFERENCE DESIGNATION: A13, B13, C64, D12, DE13, E13, F9, FG13, G13, H13, J13, K13, L12, R13.					— INACTIVE — REPLACED BY NONE MR 6-1-79 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>MP17</td> <td>35</td> <td>B</td> <td>35ERN020</td> <td>6-1-79</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MP17</td> <td>MP</td> <td>A</td> <td>35ERN020</td> <td>6-1-79</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CLASS</td> <td>MODEL</td> <td>PLANT</td> <td>REV</td> <td>RELEASE NO.</td> <td>DFTS</td> <td>DATE</td> <td>CHECK</td> <td>APPD</td> <td></td> </tr> </table>					MP17	35	B	35ERN020	6-1-79						MP17	MP	A	35ERN020	6-1-79						CLASS	MODEL	PLANT	REV	RELEASE NO.	DFTS	DATE	CHECK	APPD																																																																																																																																																																																																																																																																																				
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CHANGED (A) RELEASED TO PRODUCTION (B) REMOVED PIN 3 FROM GND ON L4, L5, L7, L9, L10, L12. FOR REVISIONS SEE DETACHED REVISIONS (DR).					REPLACES DRG 315-0533031 THIS DRAWING AND INFORMATION HEREON IS THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED. UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE: INCH MINIMUM .XX 2. .XXX 2. CLASS: MP17 START: 12/1/78 DFTS: JDE OWNER: <i>Carlin</i> 12/1/78 DESIGNER: D. WALL APPD: <i>W. Wall</i> UNIT: PROCESSOR NAME: SCHEMATIC-LOGIC, 1700 TRANSFORM W/BCD SHEET 1 OF 18 DWB SIZE: 96752605 SCALE: NONE CODE: B					DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA 315-0536975 8HFT/BJCT.																																																																																																																																																																																																																																																																																																																					

FORM NO. E-1263

Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 2 of 19)



(25,4)MM
1 INCH

315-0532605-6
 96752605-18

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS
ENMML	53		16-A6		MA0/	231		16-A4		MM08		55	8-C1	
ENMMLB/	268		16-C7		MA1/	257		16-A4		MM09		56	8-D1	
ENMMU	256		16-A6		MA2/	258		16-A4		MM10		57	8-C1	
ENMMUB/	236		16-C7		MA3/	247		16-A4		MM11		58	8-C1	
EVENPAR	74		12-B3		MA4/	246		16-A3		MM12		63	8-C1	
GATEAB/	272		12-D3		MA5/	244		16-A3		MM13		65	7-D1	
GATEIXT/	226		5-D8		MA6/	253		16-A3		MM14		66	7-C1	
GATEIXT-/	279		5-D8		MA7/	255		16-A3		MM15		70	7-D1	
GATEMIR/	88		12-A8		MCDELAYED/	267		13-B6		MM16		40	18-D5	
GETMAK/		87	12-A6		MEMPROTBT/	274		5-D4 13-B7		MM17		41	18-D5	
ILLCHAR0/	12		11-D7		MIR04-	219		11-C8		MM18		49	18-D5	
ILLCHAR1/	217		11-D7		MODE11/	270		12-D6		MM19		48	18-D5	
ILLCHAR2/	13		11-B7		MM00		28	8-D1		MM20		47	18-D5	
ILLCHAR3/	218		11-B7		MM01		31	8-C1		MM21		46	18-D5	
INDOOF	294		12-D3		MM02		27	7-C1		MM22		45	18-C5	
					MM03		26	7-C1		MM23		42	18-C5	
					MM04		25	7-C1		MM24		77	18-D1	
					MM05		24	7-C1		MM25		78	18-D1	
					MM06		23	7-C1		MM26		79	18-D1	
					MM07		22	8-C1		MM27		80	18-D1	

7. THIS LOGIC IS FOR PWB 96744222 (NCR P/N 315-0532463).

⑥ JUMPER REQUIRED BETWEEN E1 & E2 FOR OPERATION OF ROM CONFIGURATION.

NOTES (UNLESS OTHERWISE SPECIFIED)

REV **8** SEE SHEET ONE FOR CHANGES

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NCR DATA PROCESSING DIVISION
RANCHO BERNARDO, CALIFORNIA

UNIT: PROCESSOR

NAME: SCHEMATIC- LOGIC, 1700

TRANSFORM W/BCD

SHEET 2 OF 18 Dwg SIZE 96752605-6

SCALE: NONE **B** 315-05326975

BHFT/BJCT

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±
.XXX ±

Figure 1-3. 1700 Transform (PMA 96752604) Logic Diagram (Sheet 3 of 19)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
MM28		81	18-D1	
MM29		82	18-D1	
MM30		83	18-CJ	
MM31		84	18-CI	
MULTIND	73		5-D4, 12-B3	
PG0/	54		16-A7	
PG1/	254		16-A7	
PG2/	249		16-A7	
PG3/	232		16-B4	
POWERFAIL	286		12-A4	
PROTECT/	245		5-D5	
READCYCLE	264		12-A6	
RPINT16/		277	12-A3	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
SELGETMAX/		275	13-A6	
SELSKIP/	72		12-C5	
SELSTOP/	71		12-C5	
SETSM106/		280	13-C1	
SETSM209/		278	13-D2	
SM105/	269		12-A4, 13-C4	
SM107	19		10-A8	
SM108	273		12-A4	
SM111	16		10-A8	
SM114/	276		13-C3	
SM209	263		13-B4	
SM213	5		10-C8	
S208	94		15-D8, 16-C8	
S209	95		8-B6, 15-B8, 16-B8	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
S210	293		14-C3, 15-D6	
S211	96		14-D5, 14-B3, 15-B6	
S212	97		14-C8, 15-D4	
S213	98		14-B8, 15-B4	
S214	99		14-D5, 15-D2	
S215	100		14-B5, 15-B2	
S5-0/		289	16-C7	
S5-1/		290	16-B7	
S5-2/		90	14-D2	
S5-3/		91	14-B2	
S5-4/		291	14-D7	
S5-5/		92	14-B7	
S5-6/		292	14-D4	
S5-7/		93	14-B4	

(25,4) 1 INCH
 67692604-612
 8750925796

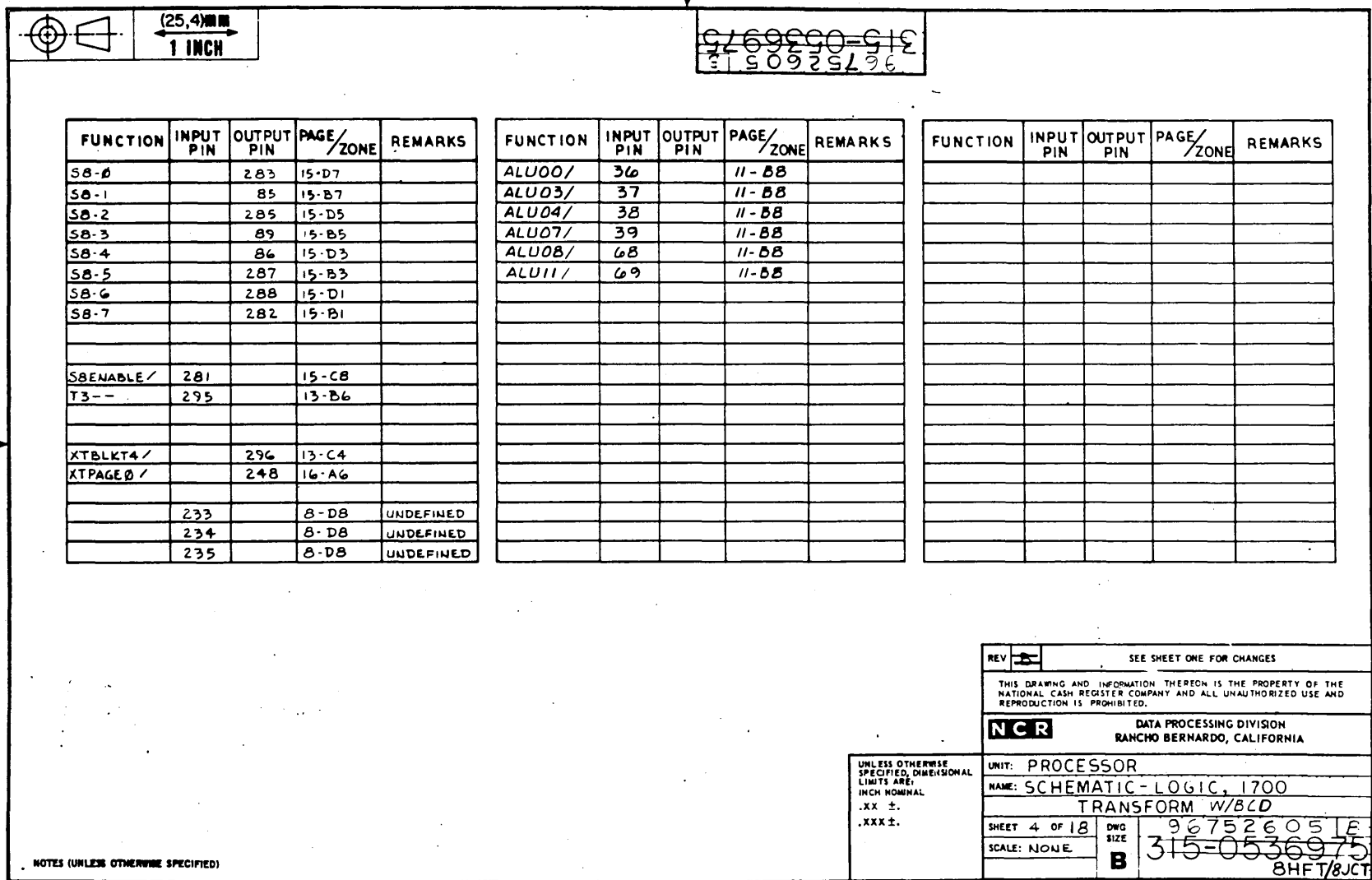
REV 3 SEE SHEET ONE FOR CHANGES
 THIS DRAWING AND INFORMATION THEREON IS THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED.
 NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA
 UNIT: PROCESSOR
 NAME: SCHEMATIC - LOGIC, 1700 TRANSFORM W/B6D
 SHEET 3 OF 18 DWO SIZE 96752605 1A
 SCALE: NONE B 315-0536975
 8HFT/BJCT

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
 .XX ±
 .XXX ±

NOTES (UNLESS OTHERWISE SPECIFIED)

NCB-DPD FORM NO. 1-1247

Figure 1-3. 1700 Transform (PMA 96752604) Logic Diagram (Sheet 4 of 19)



[illegible]

Figure 1-3. 1700 Transform (FVA 96752604) Logic Diagram (Sheet 7 of 19)

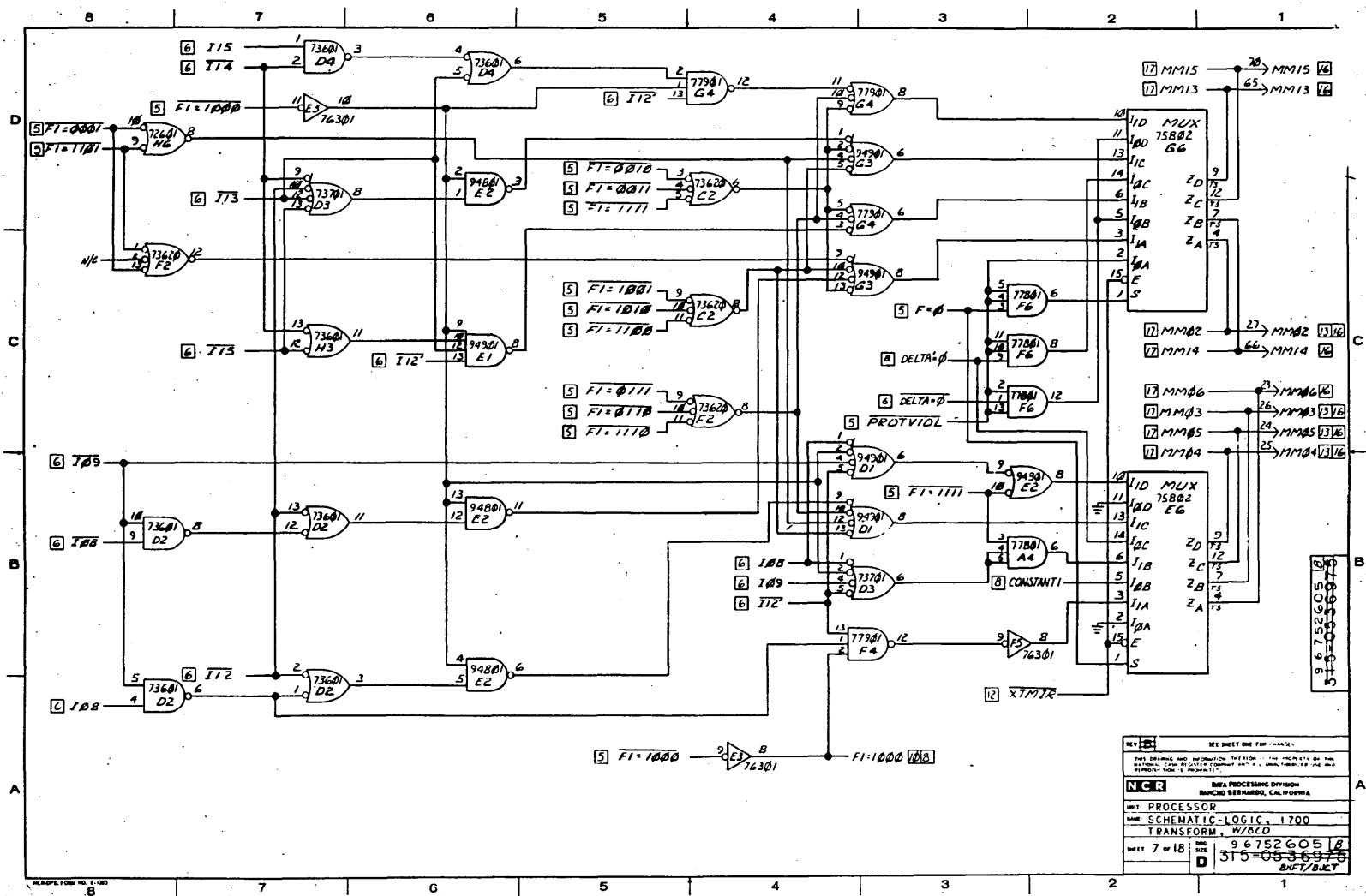


Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 8 of 19)

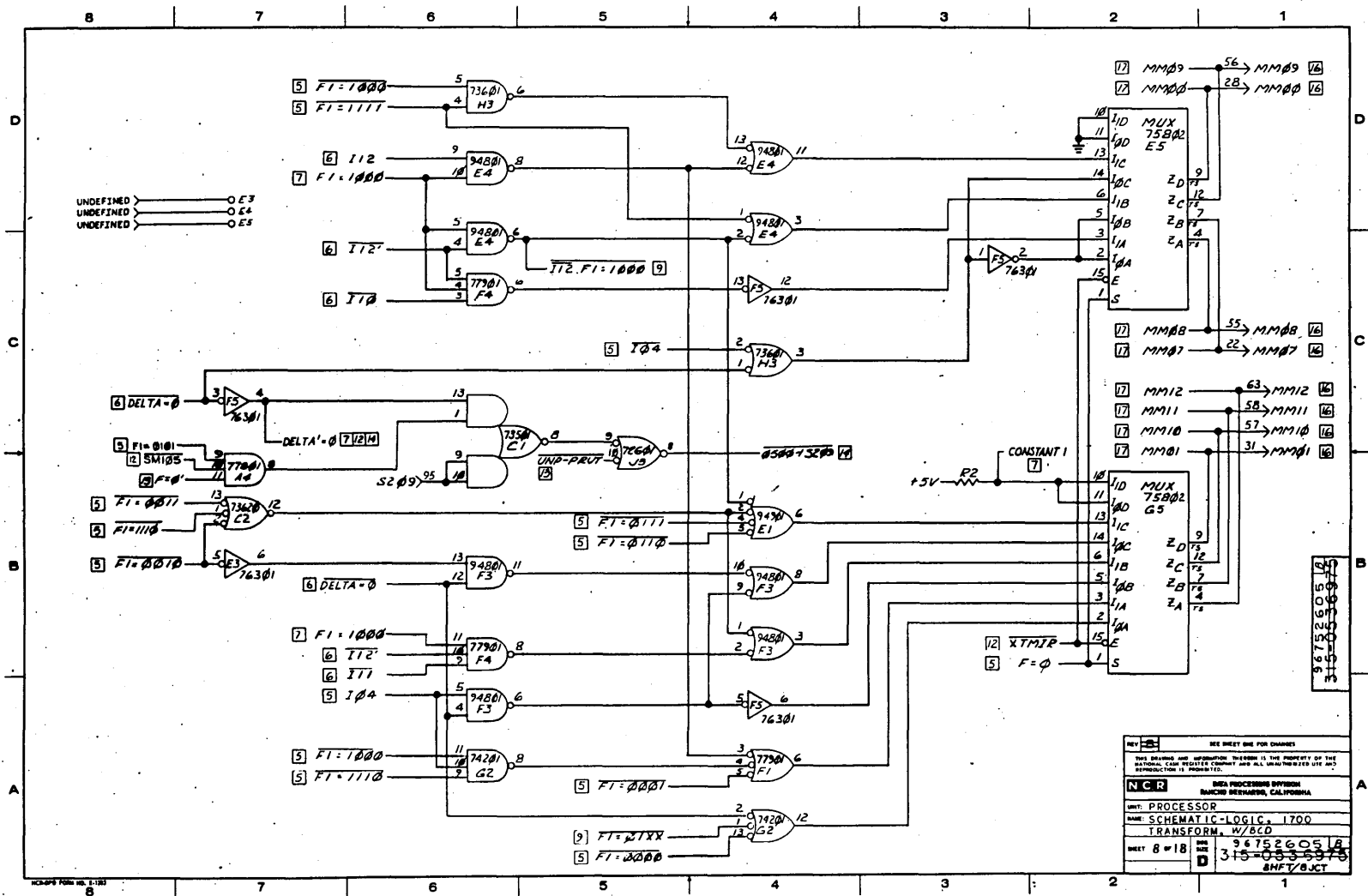
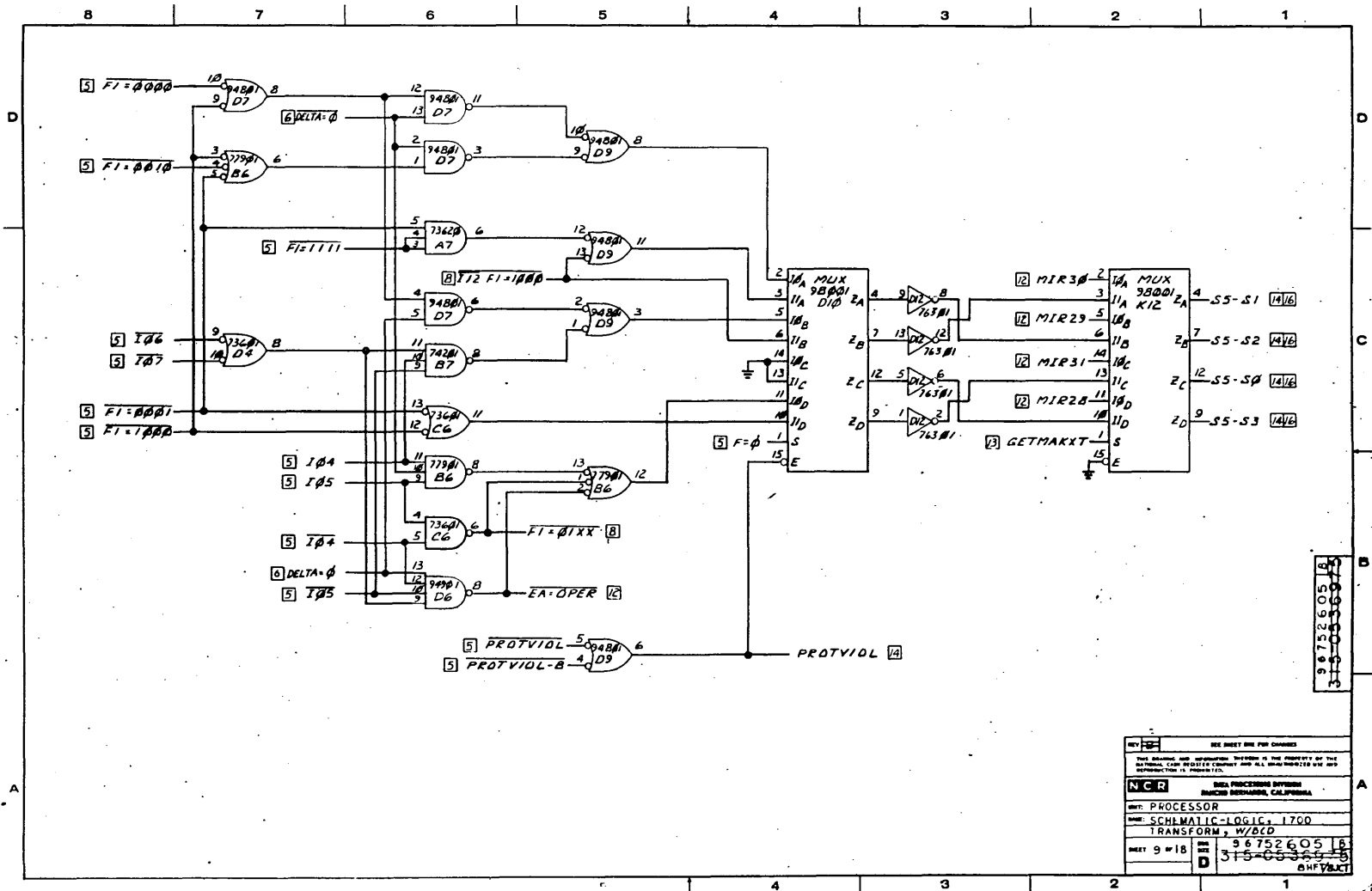


Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 9 of 19)



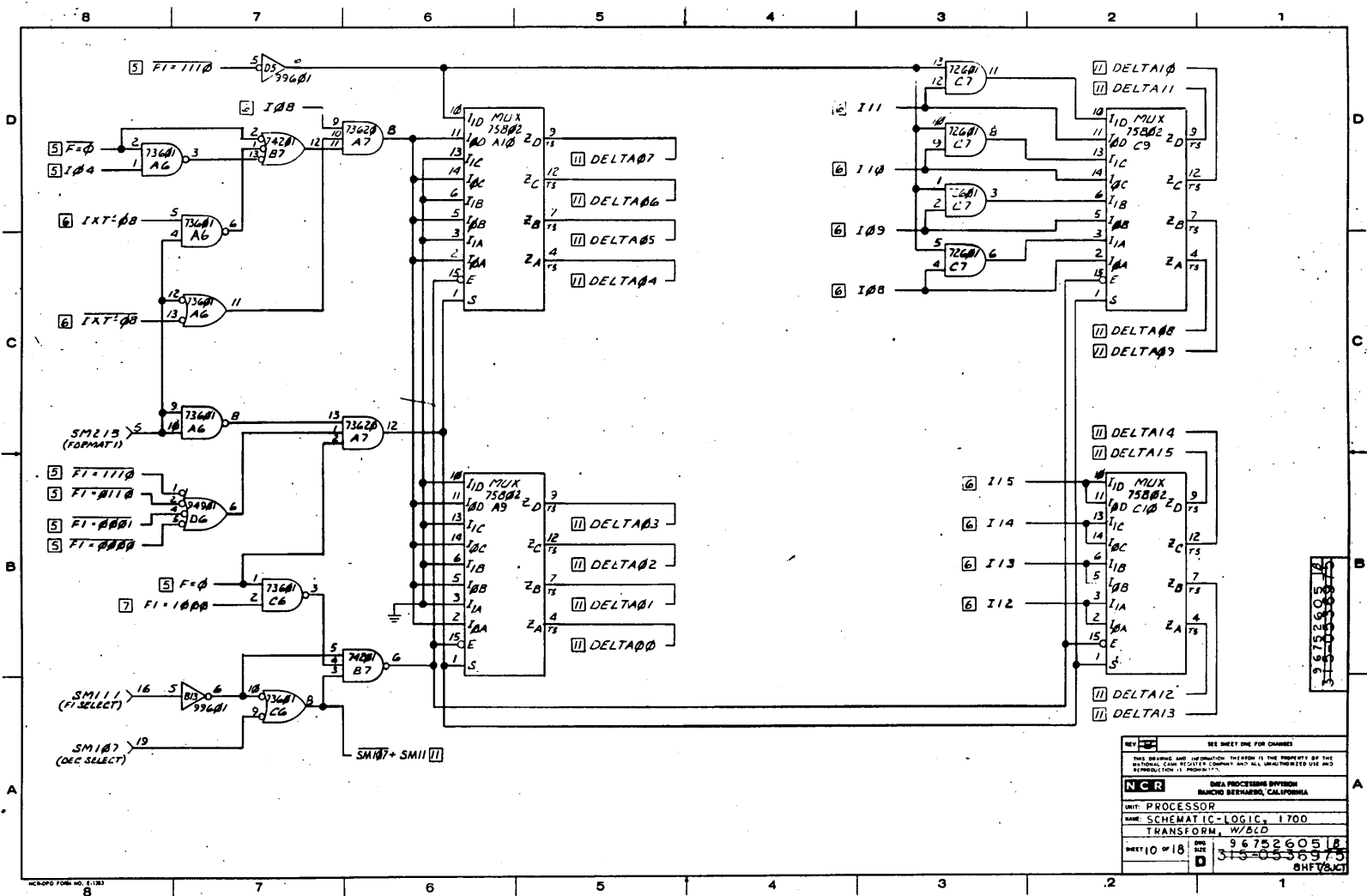
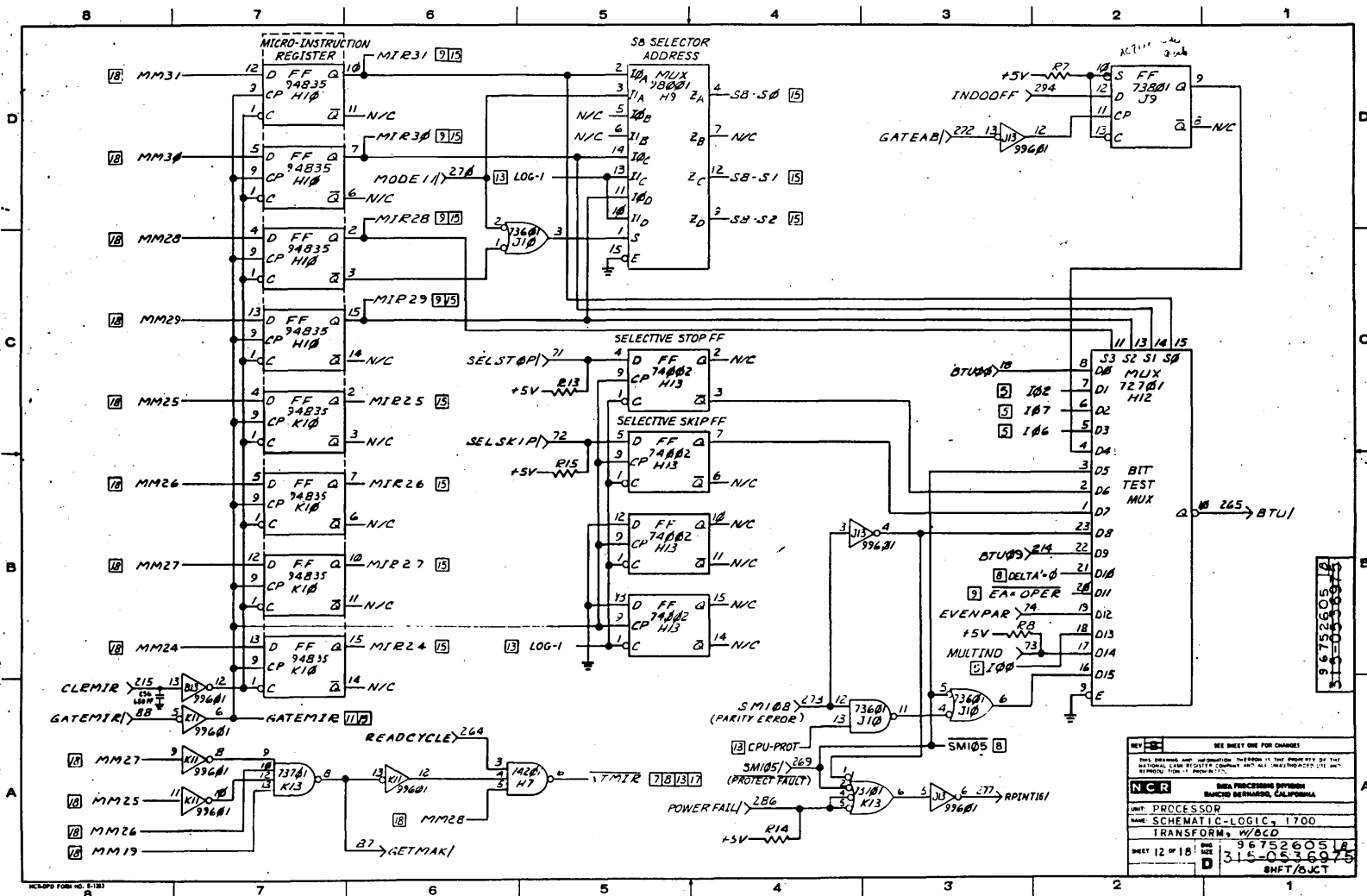


Figure 1-3. I700 Transform (PWA 96752604) Logic Diagram (Sheet 12 of 19)



60475100 A

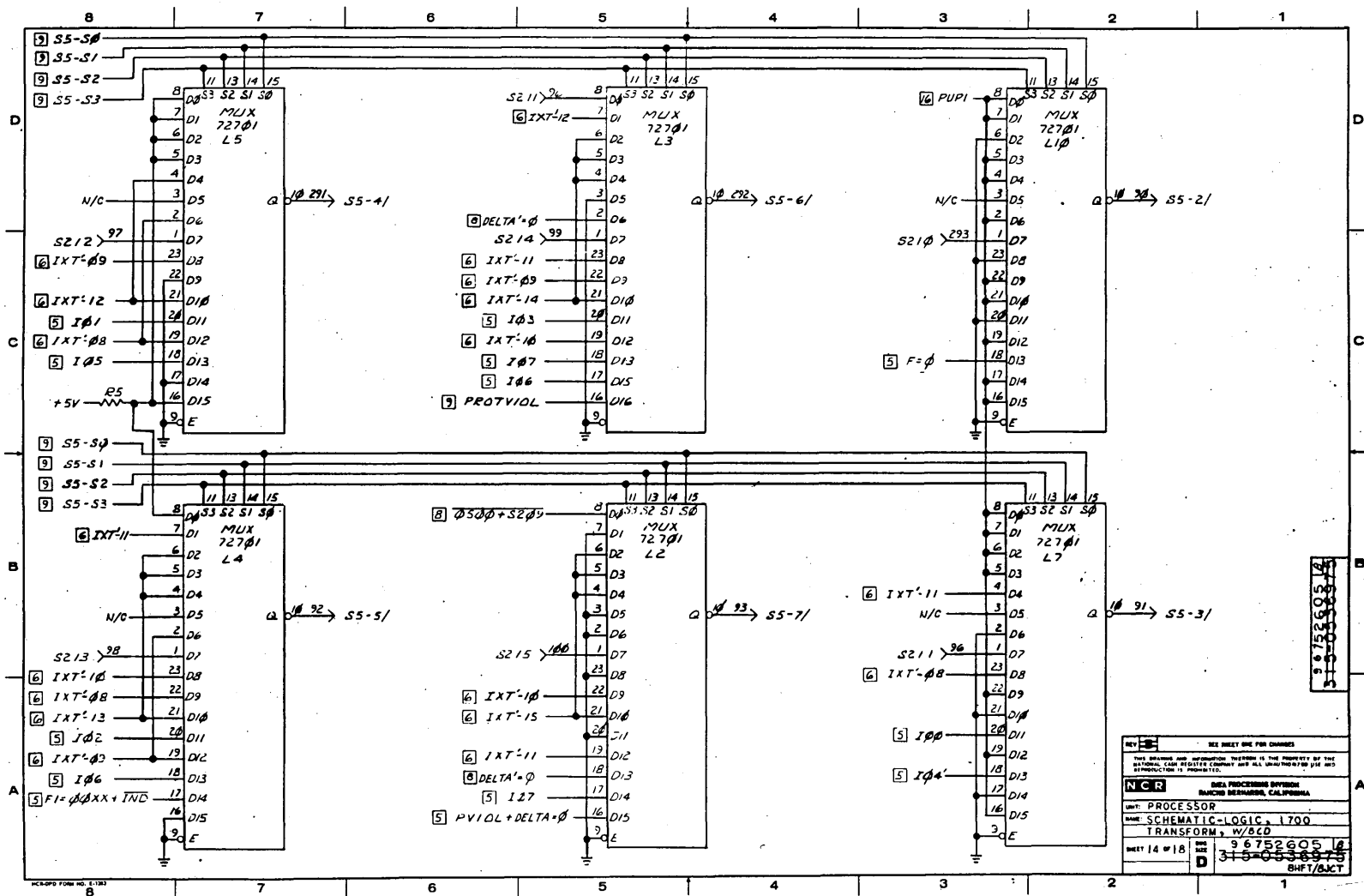


Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 15 of 19)

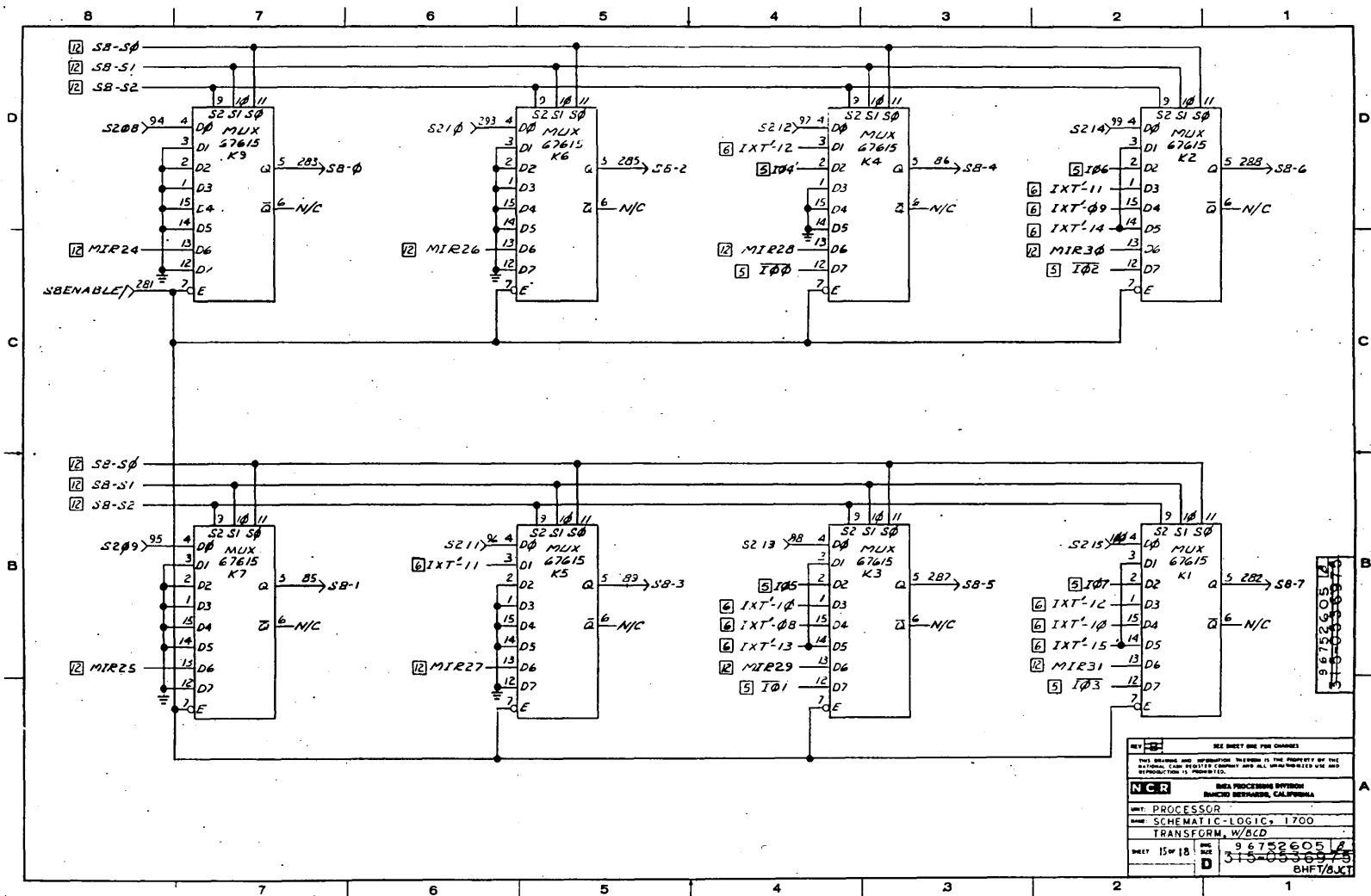


Figure 1-3. 1700 Transform (PMA 96752604) Logic Diagram (Sheet 16 of 19)

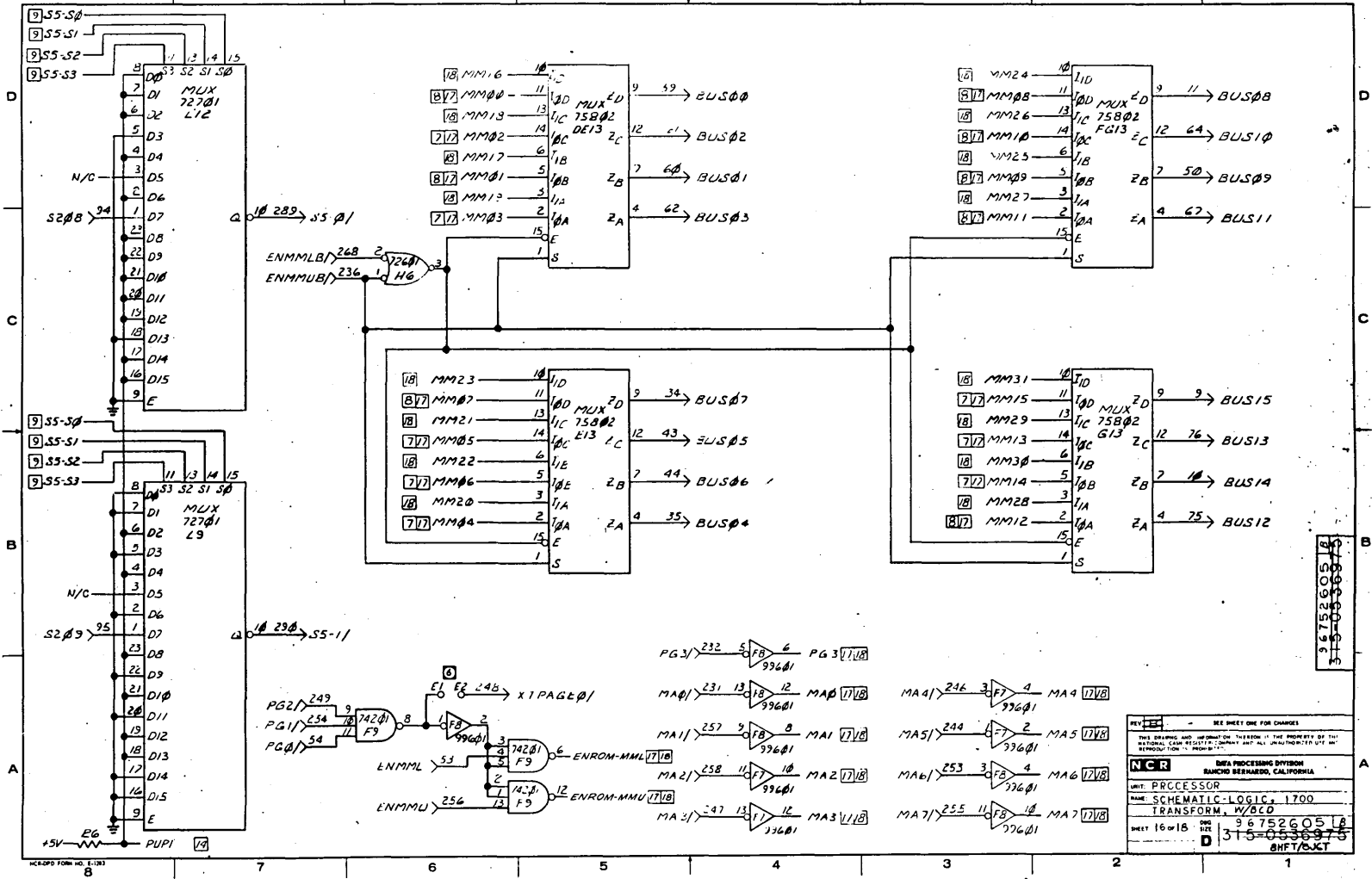


Figure 1-3. 1700 Transform (FMA 96752604) Logic Diagram (Sheet 17 of 19)

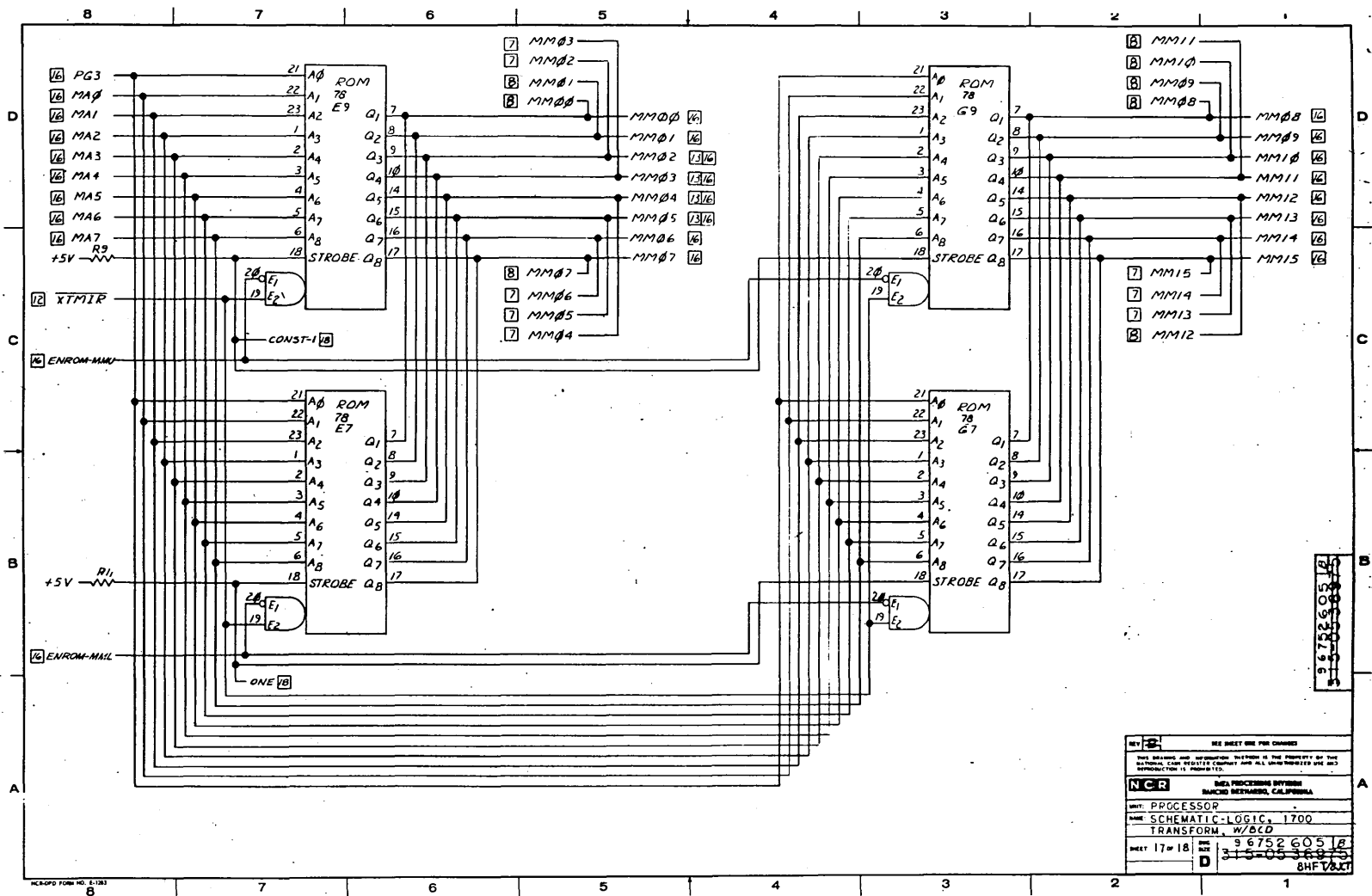


Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 18 of 19)

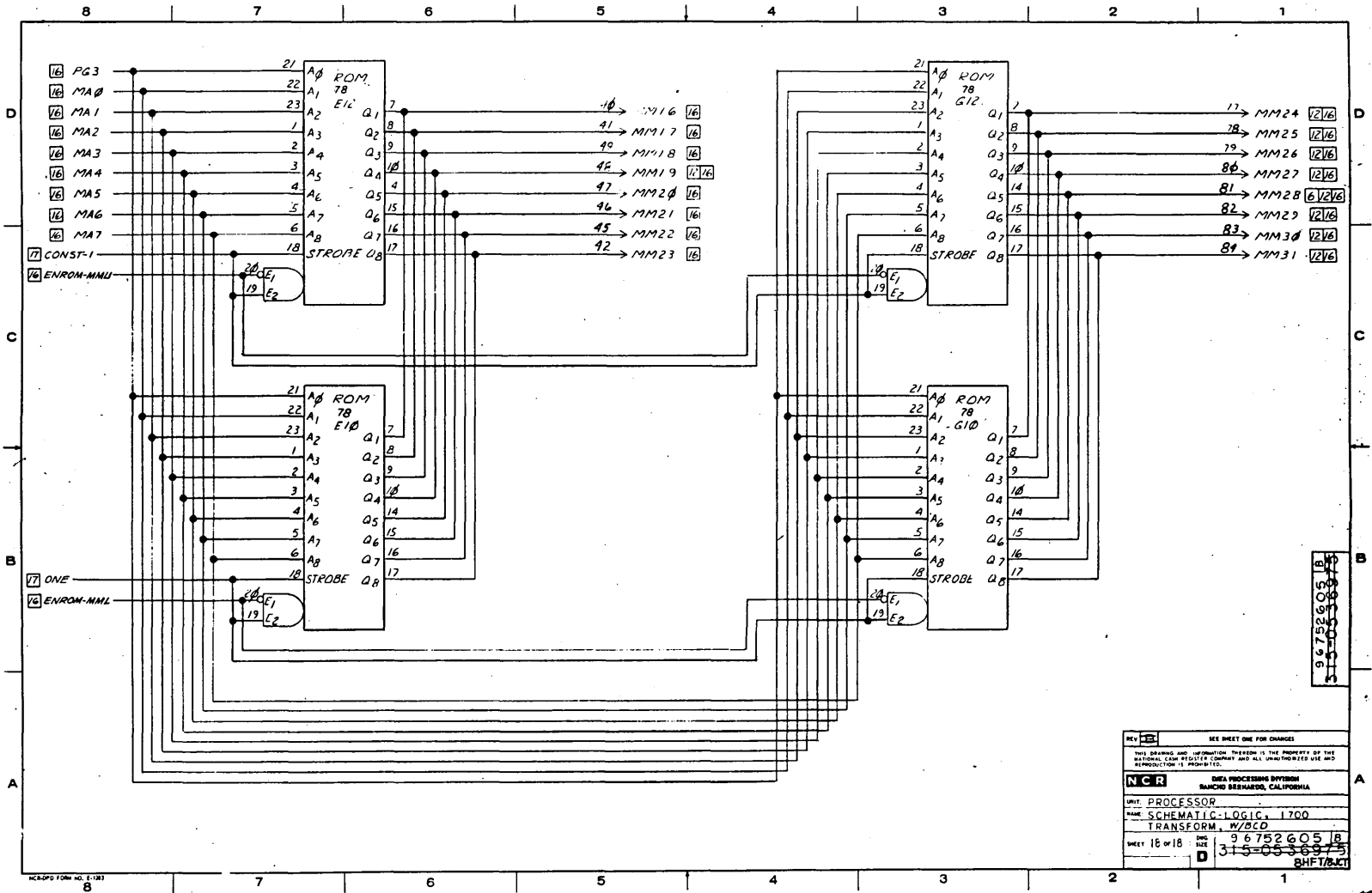


Figure 1-3. 1700 Transform (PWA 96752604) Logic Diagram (Sheet 19 of 19)

2 M(TD)

DWN	D. LINVILLE	21 FEB 78	 CONTROL DATA CORPORATION DATA SYSTEMS LA JOLLA DIVISION CODE IDENT 09132	TITLE LOGIC DIAGRAM - 1700		PREFIX	DOCUMENT NO.	REV.
CHKD	<i>R. H. Linville</i>	2-28-78		TRANSFORM. W/BCD(SHFT/BJCT)		DR	96752605	D
ENG	<i>R. H. Linville</i>	2-21-78		FIRST USED ON		SHEET 1 OF 1		
MFG	<i>R. H. Linville</i>	2-1-78						
APPR	<i>R. H. Linville</i>	2-29-78						

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP									
A	DS21084	CL A. RELEASED	DL	3-29-78	<i>DL</i>	AW									
B	DS21210	SEE ECO	<i>RJR</i>	9-28-78	<i>DL</i>	AW									
C	DS21395	- INACTIVE -	BR	6-6-79	<i>DL</i>	AW									
D	DS21664	REV UP-DATE	<i>RJR</i>	7-16-79	<i>DL</i>	AW									
		- INACTIVE - REPLACED BY NONE BR 5-31-79		INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.											

NOTES:

DETACHED LISTS

Figure 1-4. Control 1 (PMA 96752114) Logic Diagram (Sheet 1 of 10)

SIGNAL			PIN	STATE	SIGNAL			PIN	STATE	SIGNAL			PIN	STATE
ALUS1/	244	0105	GATE1/	89	0105	NIR31-	224	0103	S6CONS1	204	0103			
ALUS2/	243	0105	GATE2/	243	0105	NIR31-800/	13	0106						
ALUS3/	244	0105	GATE3/	243	0105	NIR16/	285	0103	TEQUAL0/	241	0101			
ALUS4/	244	0105	GATE4/	243	0105	NIR16/	85	0103						
ALUS5/	244	0105	GATE5/	243	0105	NIR16/	27	0103	T0-/	29	0101			
ALUS6/	244	0105	GATE6/	243	0105	NIR16/	26	0106	T1-/	6	0101			
ALUS7/	244	0105	GATE7/	243	0105	NIR16/	25	0107	T2-/	3	0101			
ALUS8/	244	0105	GATE8/	243	0105	NIR16/	24	0107	T2-DDCLK/	39	0101			
ALUS9/	244	0105	GATE9/	243	0105	NIR16/	23	0107	T3-/	74	0101			
ALUS10/	244	0105	GATE10/	243	0105	NIR16/	22	0107	T3- -	99	0101			
ALUS11/	244	0105	GATE11/	243	0105	NIR16/	55	0107	T3-MEM//	37	0101			
ALUS12/	244	0105	GATE12/	243	0105	NIR16/	56	0106	T4-/	75	0101			
ALUS13/	244	0105	GATE13/	243	0105	NIR16/	57	0106	T4-T5/	218	0101			
ALUS14/	244	0105	GATE14/	243	0105	NIR16/	58	0106	WEF1	279	0105			
ALUS15/	244	0105	GATE15/	243	0105	NIR16/	63	0106	WRT32BIT/	86	0103			
ALUS16/	244	0105	GATE16/	243	0105	NIR16/	65	0104						
ALUS17/	244	0105	GATE17/	243	0105	NIR16/	66	0104	XTBLKT4/	274	0105			
ALUS18/	244	0105	GATE18/	243	0105	NIR16/	70	0104						
ALUS19/	244	0105	GATE19/	243	0105	NIR16/	81	0105						
ALUS20/	244	0105	GATE20/	243	0105	NIR16/								
ALUS21/	244	0105	GATE21/	243	0105	NIR16/								
ALUS22/	244	0105	GATE22/	243	0105	NIR16/								
ALUS23/	244	0105	GATE23/	243	0105	NIR16/								
ALUS24/	244	0105	GATE24/	243	0105	NIR16/								
ALUS25/	244	0105	GATE25/	243	0105	NIR16/								
ALUS26/	244	0105	GATE26/	243	0105	NIR16/								
ALUS27/	244	0105	GATE27/	243	0105	NIR16/								
ALUS28/	244	0105	GATE28/	243	0105	NIR16/								
ALUS29/	244	0105	GATE29/	243	0105	NIR16/								
ALUS30/	244	0105	GATE30/	243	0105	NIR16/								
ALUS31/	244	0105	GATE31/	243	0105	NIR16/								
ALUS32/	244	0105	GATE32/	243	0105	NIR16/								
ALUS33/	244	0105	GATE33/	243	0105	NIR16/								
ALUS34/	244	0105	GATE34/	243	0105	NIR16/								
ALUS35/	244	0105	GATE35/	243	0105	NIR16/								
ALUS36/	244	0105	GATE36/	243	0105	NIR16/								
ALUS37/	244	0105	GATE37/	243	0105	NIR16/								
ALUS38/	244	0105	GATE38/	243	0105	NIR16/								
ALUS39/	244	0105	GATE39/	243	0105	NIR16/								
ALUS40/	244	0105	GATE40/	243	0105	NIR16/								
ALUS41/	244	0105	GATE41/	243	0105	NIR16/								
ALUS42/	244	0105	GATE42/	243	0105	NIR16/								
ALUS43/	244	0105	GATE43/	243	0105	NIR16/								
ALUS44/	244	0105	GATE44/	243	0105	NIR16/								
ALUS45/	244	0105	GATE45/	243	0105	NIR16/								
ALUS46/	244	0105	GATE46/	243	0105	NIR16/								
ALUS47/	244	0105	GATE47/	243	0105	NIR16/								
ALUS48/	244	0105	GATE48/	243	0105	NIR16/								
ALUS49/	244	0105	GATE49/	243	0105	NIR16/								
ALUS50/	244	0105	GATE50/	243	0105	NIR16/								
ALUS51/	244	0105	GATE51/	243	0105	NIR16/								
ALUS52/	244	0105	GATE52/	243	0105	NIR16/								
ALUS53/	244	0105	GATE53/	243	0105	NIR16/								
ALUS54/	244	0105	GATE54/	243	0105	NIR16/								
ALUS55/	244	0105	GATE55/	243	0105	NIR16/								
ALUS56/	244	0105	GATE56/	243	0105	NIR16/								
ALUS57/	244	0105	GATE57/	243	0105	NIR16/								
ALUS58/	244	0105	GATE58/	243	0105	NIR16/								
ALUS59/	244	0105	GATE59/	243	0105	NIR16/								
ALUS60/	244	0105	GATE60/	243	0105	NIR16/								
ALUS61/	244	0105	GATE61/	243	0105	NIR16/								
ALUS62/	244	0105	GATE62/	243	0105	NIR16/								
ALUS63/	244	0105	GATE63/	243	0105	NIR16/								
ALUS64/	244	0105	GATE64/	243	0105	NIR16/								
ALUS65/	244	0105	GATE65/	243	0105	NIR16/								
ALUS66/	244	0105	GATE66/	243	0105	NIR16/								
ALUS67/	244	0105	GATE67/	243	0105	NIR16/								
ALUS68/	244	0105	GATE68/	243	0105	NIR16/								
ALUS69/	244	0105	GATE69/	243	0105	NIR16/								
ALUS70/	244	0105	GATE70/	243	0105	NIR16/								
ALUS71/	244	0105	GATE71/	243	0105	NIR16/								
ALUS72/	244	0105	GATE72/	243	0105	NIR16/								
ALUS73/	244	0105	GATE73/	243	0105	NIR16/								
ALUS74/	244	0105	GATE74/	243	0105	NIR16/								
ALUS75/	244	0105	GATE75/	243	0105	NIR16/								
ALUS76/	244	0105	GATE76/	243	0105	NIR16/								
ALUS77/	244	0105	GATE77/	243	0105	NIR16/								
ALUS78/	244	0105	GATE78/	243	0105	NIR16/								
ALUS79/	244	0105	GATE79/	243	0105	NIR16/								
ALUS80/	244	0105	GATE80/	243	0105	NIR16/								
ALUS81/	244	0105	GATE81/	243	0105	NIR16/								
ALUS82/	244	0105	GATE82/	243	0105	NIR16/								
ALUS83/	244	0105	GATE83/	243	0105	NIR16/								
ALUS84/	244	0105	GATE84/	243	0105	NIR16/								
ALUS85/	244	0105	GATE85/	243	0105	NIR16/								
ALUS86/	244	0105	GATE86/	243	0105	NIR16/								
ALUS87/	244	0105	GATE87/	243	0105	NIR16/								
ALUS88/	244	0105	GATE88/	243	0105	NIR16/								
ALUS89/	244	0105	GATE89/	243	0105	NIR16/								
ALUS90/	244	0105	GATE90/	243	0105	NIR16/								
ALUS91/	244	0105	GATE91/	243	0105	NIR16/								
ALUS92/	244	0105	GATE92/	243	0105	NIR16/								
ALUS93/	244	0105	GATE93/	243	0105	NIR16/								
ALUS94/	244	0105	GATE94/	243	0105	NIR16/								
ALUS95/	244	0105	GATE95/	243	0105	NIR16/								
ALUS96/	244	0105	GATE96/	243	0105	NIR16/								
ALUS97/	244	0105	GATE97/	243	0105	NIR16/								
ALUS98/	244	0105	GATE98/	243	0105	NIR16/								
ALUS99/	244	0105	GATE99/	243	0105	NIR16/								
ALUS100/	244	0105	GATE100/	243	0105	NIR16/								
ALUS101/	244	0105	GATE101/	243	0105	NIR16/								
ALUS102/	244	0105	GATE102/	243	0105	NIR16/								
ALUS103/	244	0105	GATE103/	243	0105	NIR16/								
ALUS104/	244	0105	GATE104/	243	0105	NIR16/								
ALUS105/	244	0105	GATE105/	243	0105	NIR16/								
ALUS106/	244	0105	GATE106/	243	0105	NIR16/								
ALUS107/	244	0105	GATE107/	243	0105	N								

60475100 A

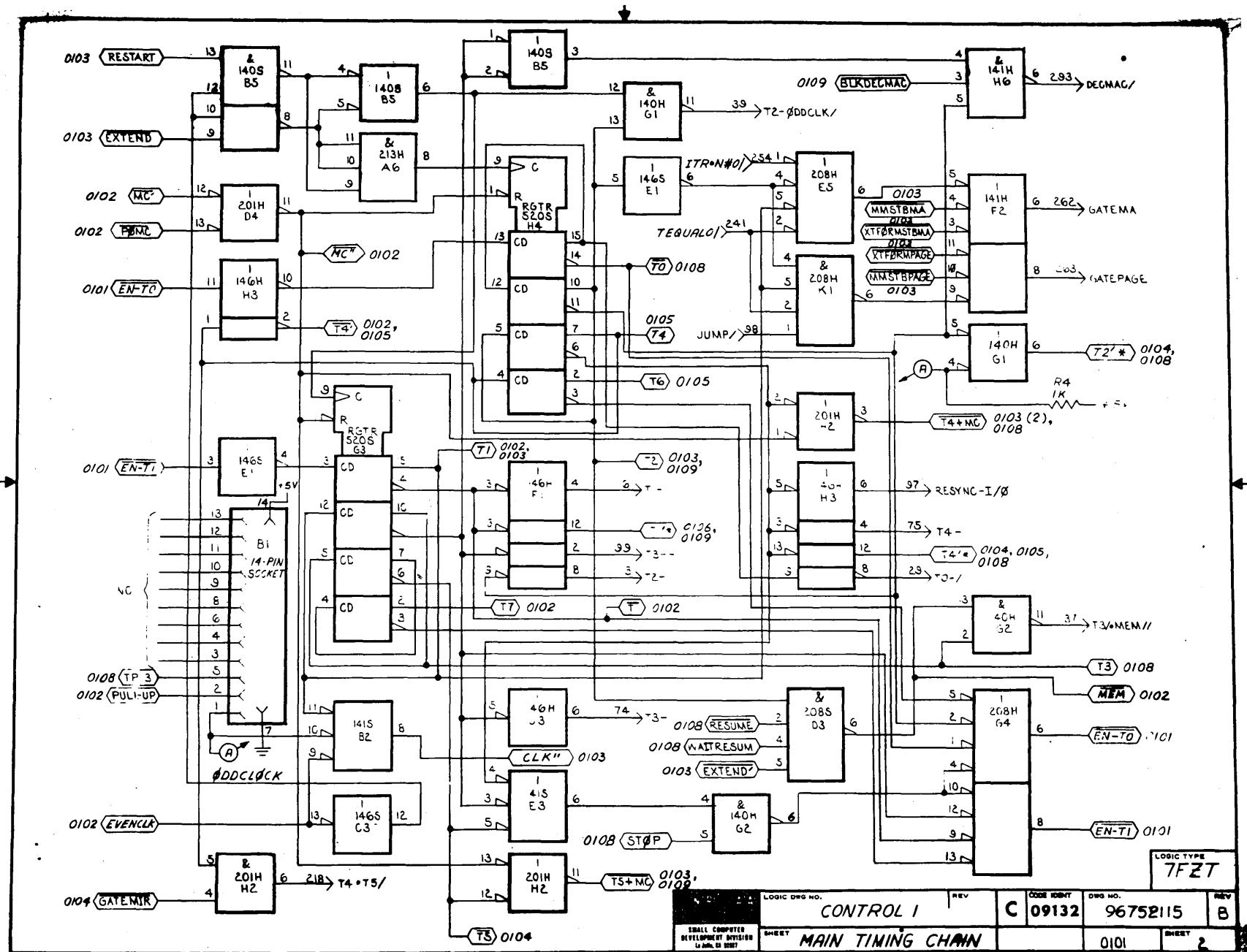


Figure 1-4. Control 1 (PWA 96752114) Logic Diagram (Sheet 4 of 10)

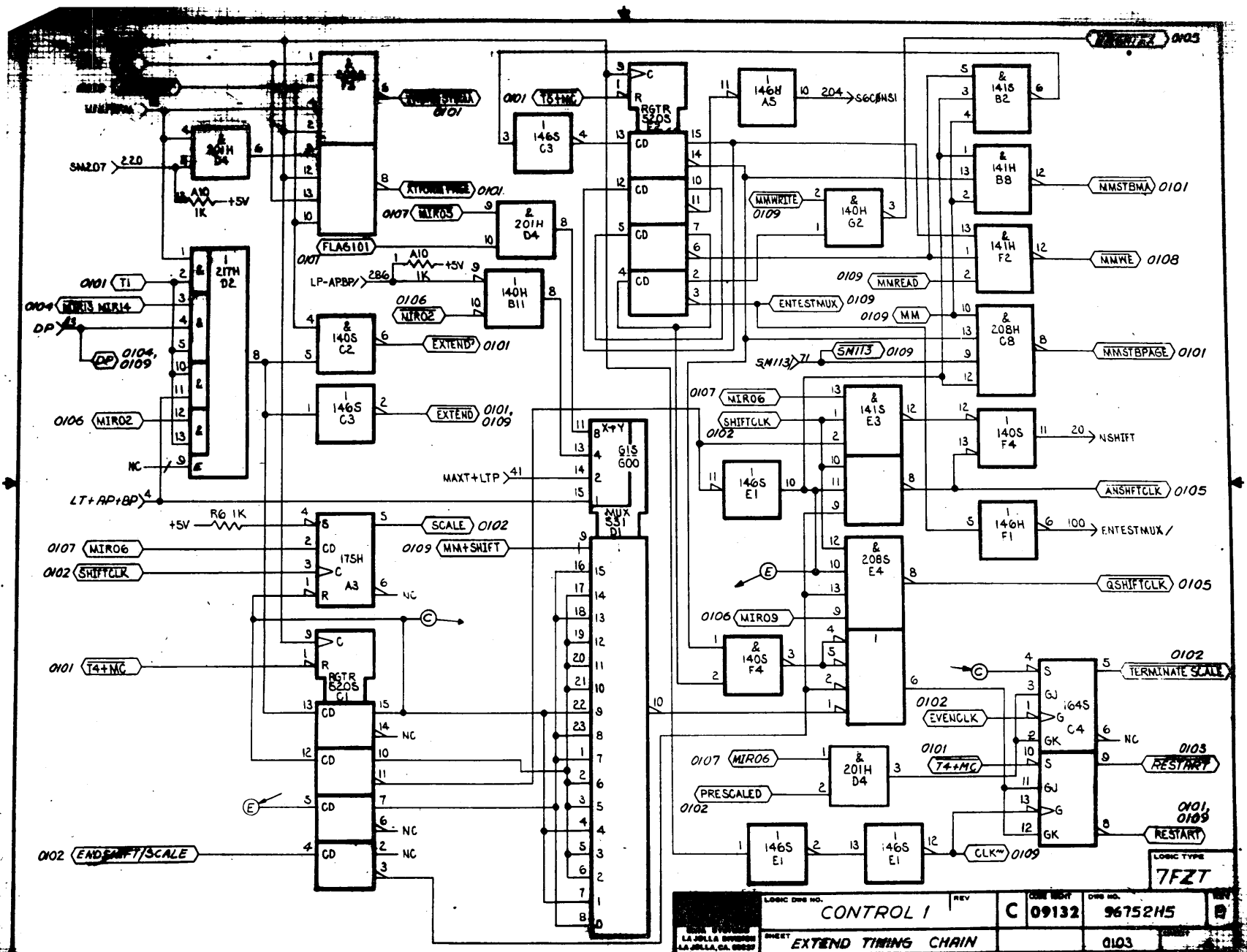
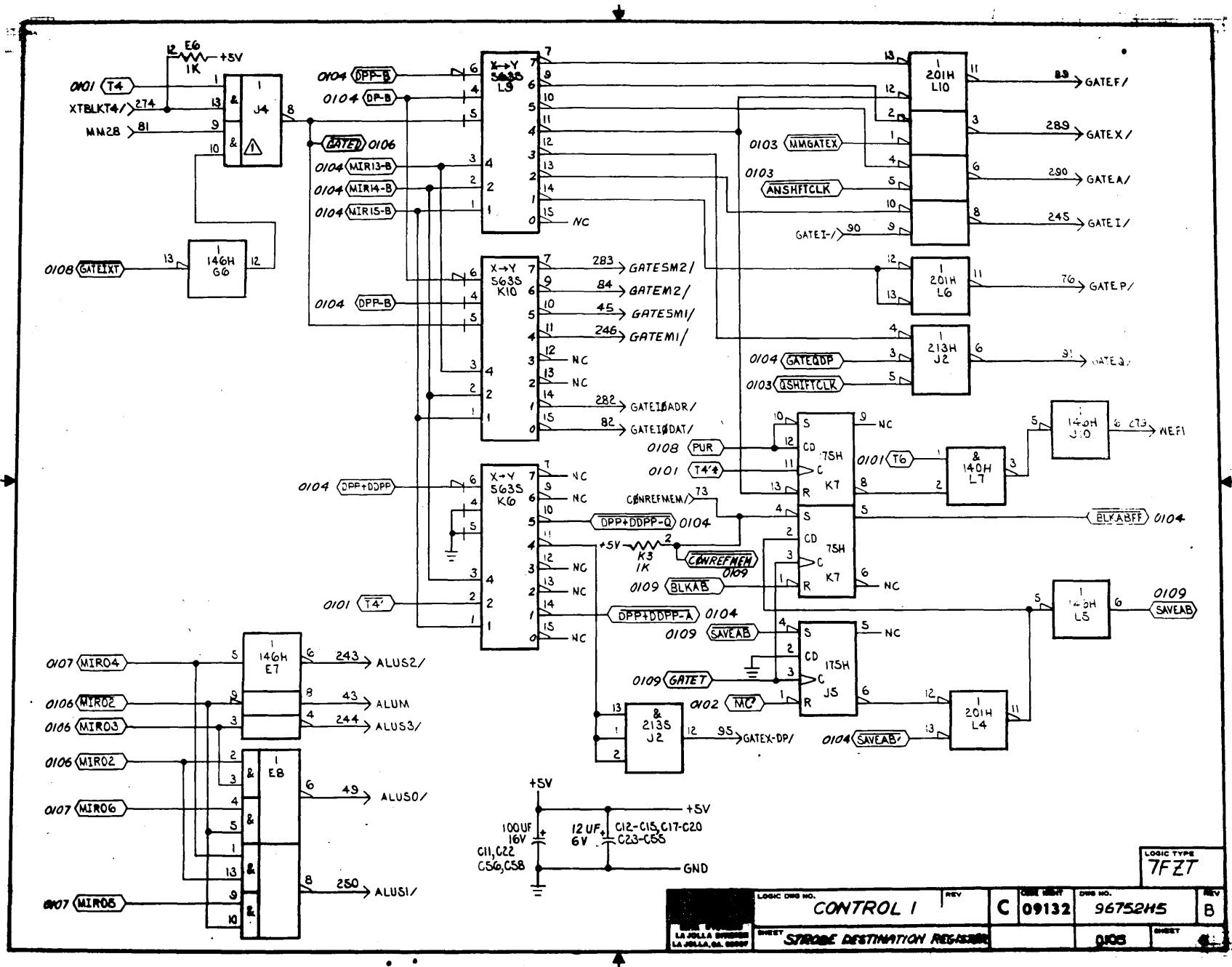


Figure 1-4. Control 1 (PMA 96752114) Logic Diagram (Sheet 6 of 10)



[illegible]

Figure I-4. Control 1 (PWA 96752114) Logic Diagram (Sheet 9 of 10)

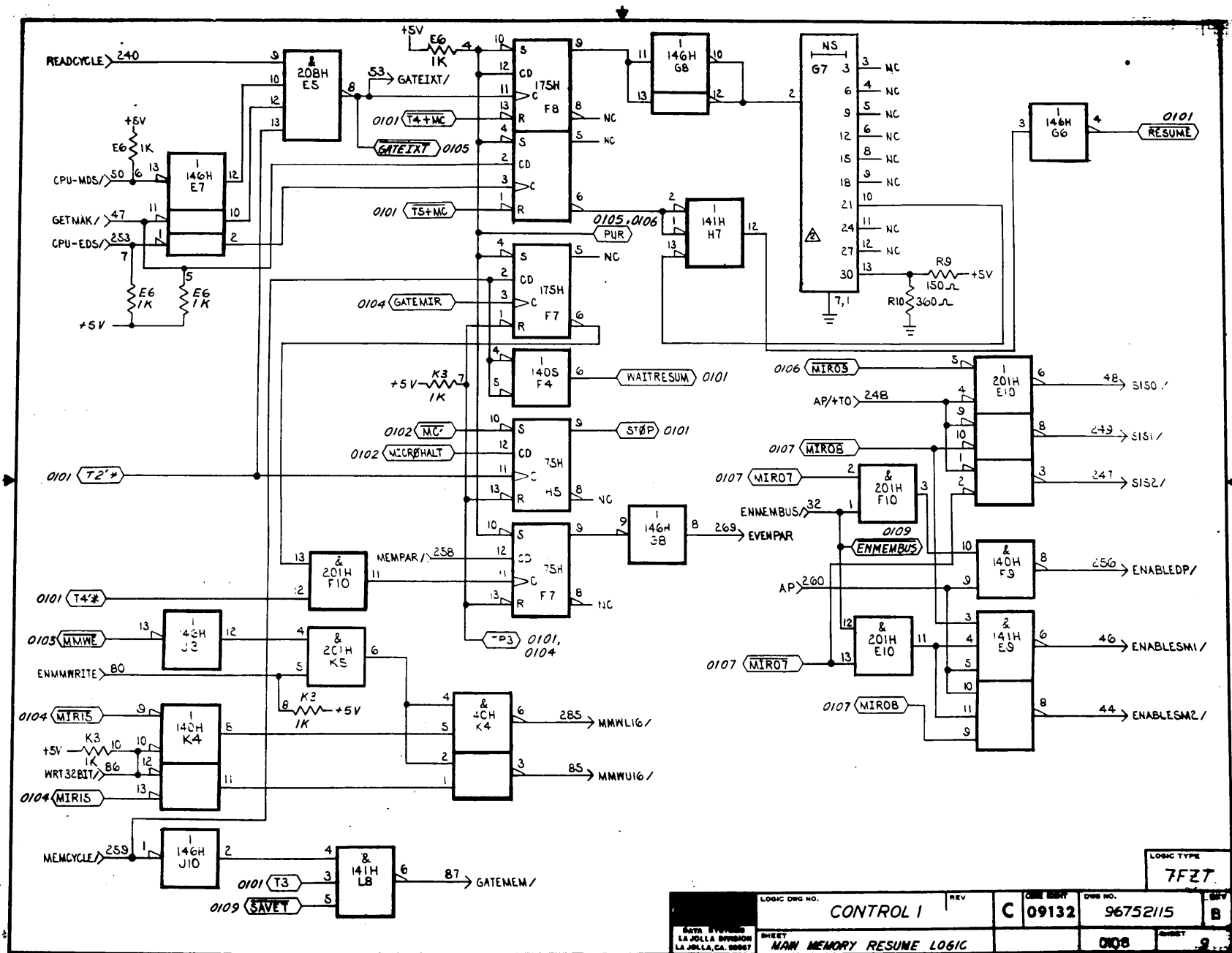


Figure 1-4. Control 1 (PWA 96752114) Logic Diagram (Sheet 10 of 10)

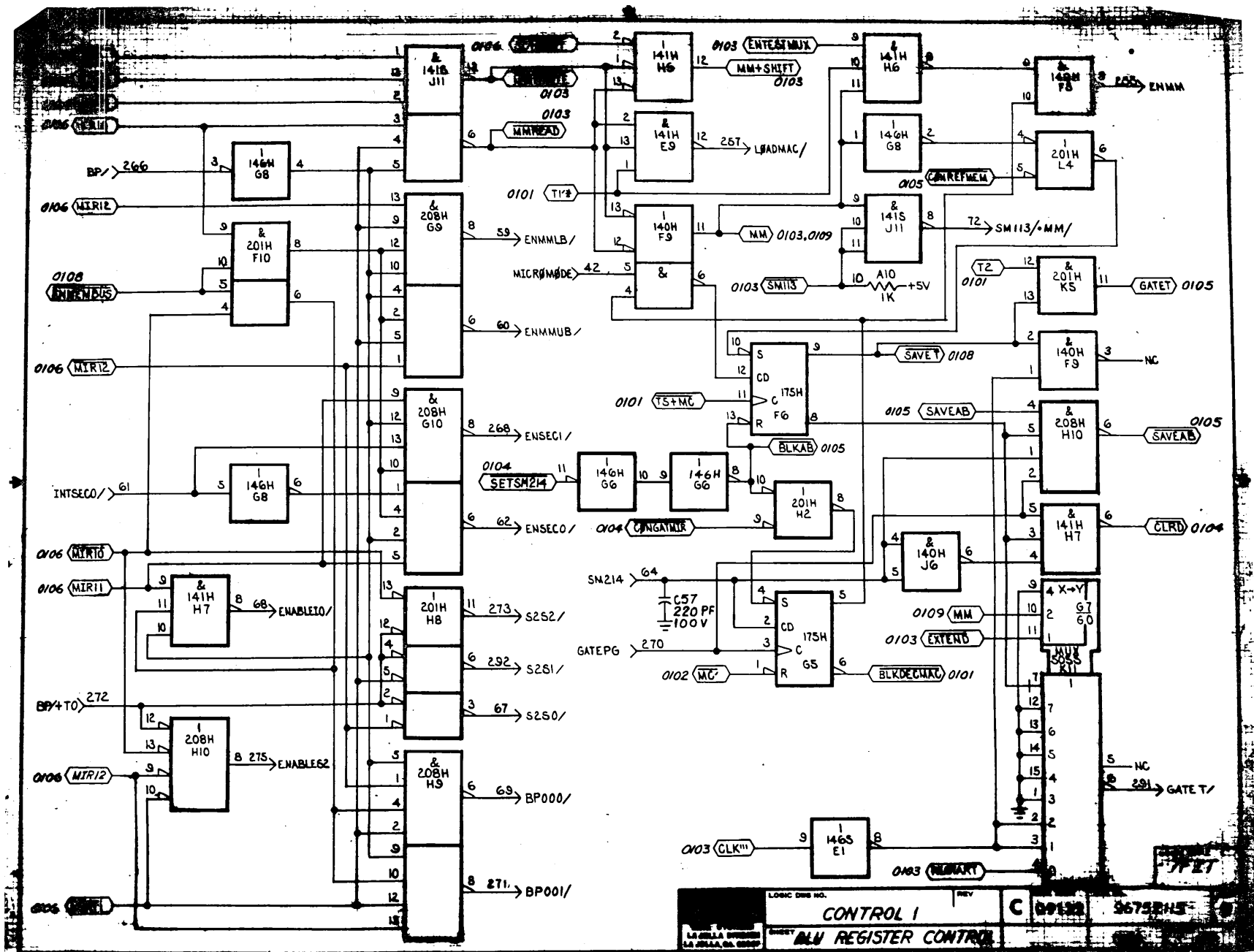


Figure 1-5. Control 1 (PWA 96751017) Logic Diagram (Sheet 1 of 14)


 (25,4)mm
1 INCH

DETACHED REVISIONS

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
ALSBSL		223	10-A4	
ALU-LSBDP	239		10-D5	
ALUM		43	13-A4	
ALUS0/		49	13-B4	
ALUS1/		250	13-A4	
ALUS2/		243	13-A4	
ALUS3/		244	13-B4	
ALU00/	34		10-D5	
ALU15/	238		10-D5	
AMODES0		9	11-A5	
AMODES1		212	11-A5	
AMSBSR		222	10-B4	
AP	260		13-D2	
AP/+T0	248		13-D2	
AREG-00	232		10-C5	
AREG-01	206		6-B8	
AREG-01	205		6-A8	
AREG-02	7		6-A8	
AREG-15	230		10-D5	
AR-ENABLED	96		6-B7	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
BP/	266		13-C8	
BP/+T0	272		13-B8	
BP000/		69	13-A6	
BP001/		271	13-A6	
CARRYIN3		17	11-B1	
CARRYIN32		215	11-C1	
CARRYOUT0	30		11-B3,10-D2	
CARRYOUT2	211		11-C3	
CLRMIR		78	8-C7	
CONGATMIR	284		8-C8,13-C4	
CONPNLRES	242		12-C8	
CONREFMEM	73		9-B4,13-C4	
CONSELMNV	264		12-C8	
CPU-EDS/	253		12-D8	
CPU-MDS/	50		12-D8	
CPUREQCONV		54	12-A4	
DDPP/	281		8-C5	
DECMAC/		293	5-B3	
DMA-PRIOR/		261	12-A4	
DP	83		7-B8,8-C5,	
			13-D8	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
DPP/	288		8-C5	
ENABLEDP/		256	13-C1	
ENABLEID/		68	13-B6	
ENABLESM1/		46	13-D1	
ENABLESM2/		44	13-D1	
ENABLES2		275	13-A6	
ENMEMBUS	32		13-D8	
ENMM		255	13-C2	
ENMMLB/		59	13-C6	
ENMMUB/		60	13-C6	
ENMMWRITE	80		12-B8	
ENSEC0/		62	13-B6	
ENSEC1/		268	13-C6	
ENTESTMUX		100	7-C4	
EVENPAR		269	12-B1	
FLAG100	276		8-D7,10-D4	
FLAG101	237		11-D4,7-B5	
FLAG103	18		11-C4	

INACTIVE

4. HIGHEST REF DESIGNATION: A10, B11, C35, D10, E10, F10, G10, H10, J11, K10, L10, R11.
 3. FILTER CAPACITOR REF DESIGNATOR: C11 THRU C29.
 2. +5VOLT PINS: 1, 2, 201, 202.
 1. GROUND PINS: 51, 52, 101, 102, 301, 302, 251, 252
 5. REF DESIGNATIONS NOT USED: A1

NOTES (UNLESS OTHERWISE SPECIFIED)

CHANGES: (F) ALL SH REVISED, MNEMONICS CHANGED, WITH NOTES REVISED TO AGREE. (SH 1 THRU 4 REDRAWN). (G) SH 8 ZONE B2: K8-8 & K8-12 DELETED CIRCLES.

FOR REVISIONS SEE DETACHED REVISIONS (DR)

INTERPLANT USAGE (CODE) REQO NEXT ASSEMBLY

MATERIAL:

COATING:

REPLACES DWG
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 .XX ±.
 .XXX ±.

CLASS: MP 17
 START: 1/1/75
 FINISH: 1/1/75
 DFTS: C. HODGINS
 CHKD: J.M. CASHION
 DESIGNED: D. WALL
 APPD: L.K.J.

UNIT: PROCESSOR
 NAME: SCHEMATIC-LOGIC, CONTROL 1

DATA PROCESSING DIVISION
 RANCHO BERNARDO, CALIFORNIA

SHEET 1 OF 13
 SCALE: NONE
 CODE: N-E

DWG SIZE: 96751018
 315-0532516
 7ERT

INTER-DIVISIONAL DOCUMENT
 Changed to this document requires approval of all Using Divisions per CDC-STD 1.01-024.

DEC-60 FORM NO. E-1245

Figure 1-5. Control 1 (PWA 96751017) Logic Diagram (Sheet 2 of 14)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
FLAG03/		209	11-B3	
GATEA/		290	9-C3	
GATEAB/		88	8-B1	
GATEA-DP/		294	8-D2	
GATEF/		89	9-C3	
GATEI/		245	9-D3	
GATEI-/	90		9-D3	
GATELOADR/		282	9-C5	
GATELOADT/		82	9-C5	
GATEIXT/		53	12-D5	
GATEMI/		246	9-C5	
GATEM2/		84	9-C5	
GATEMA/		262	5-C2	
GATEMEM/		87	12-B2	
GATEMIR/		236	8-C7	
GATEP/		76	9-D3	
GATEPAGE		263	5-C2	
GATEPG-	270		12-C8, B-B5	
GATEQ/		91	9-D3	
GATEQ-DP/		92	8-D2	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
GATESM1/		45	9-C5	
GATESM2/		283	9-C5	
GATET/		291	13-B1	
GATEX/		289	9-C3	
GATEX-DP/		95	9-B4	
GETMAK/	47		12-D8	
HALT/	94		6-B4	
INTSEC0/	61		13-C8	
ITR-N#0/	254		5-C4	
JUMP/	98		5-C4	
LOADMAC/		257	13-B5	
LP-APBP/	286		7-B7	
LT+AP+BP	4		7-C8	
MAINTMODE		265	12-B3	
MAXFORM	19		7-D8	
MAXT+LTP	41		7-C8	
MC/		298	6-D6	
MCDELAYD/		297	6-D4	
MC-S/	93		6-D7	
MEMCYCLE/	259		12-B6, 2-A4	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
MEMPAR/	258		12-B3	
MICROMODE	42		13-C3	
MICRORUN		203	6-C3	
MICROSTR7/	5		6-B3	
MICROSTOP/	33		6-B2	
MIR02-		28	10-B7	
MIR03-		225	10-B7	
MIR04-		229	11-D7	
MIR05-		227	11-C7	
MIR06-		228	11-C7	
MIR07-		235	11-C7	
MIR08-		226	11-B7	
MIR09-		38	10-D7	
MIR10-		36	10-C7	
MIR11-		234	10-C7	
MIR12-		35	10-C7	
MIR13-		77	8-B5	

(25,4)mm
 1 INCH

91015L7b

REV G SEE SHEET ONE FOR CHANGES

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NCR DATA PROCESSING DIVISION
 RANCHO BERNARDO, CALIFORNIA

UNIT: PROCESSOR
 NAME: SCHEMATIC-LOGIC, CONTROL 1

SHEET 2 OF 13
 SCALE: NONE

DPG SIZE
 B

96751018
 315-0532515
 7ERT

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
 INCH NOMINAL
 .XX ±
 .XXX ±

NOTES (UNLESS OTHERWISE SPECIFIED)

FORM NO. E-1367

Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 3 of 14)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
MIR14-		278	8-A5	
MIR15-		79	8-A5	
MIR29-	280		8-D7	
MIR30-	213		11-B7	
MIR31-	224		10-A5	
MIR31-000		13	10-A4	
MMWL16/		285	12-A6	
MMWU16/		85	12-A6	
MM02	27		10-B8	
MM03	26		10-B8	
MM04	25		11-D8	
MM05	24		11-D8	
MM06	23		11-C8	
MM07	22		11-C8	
MM08	55		11-B8	
MM09	56		10-D8	
MM10	57		10-D8	
MM11	58		10-C8	
MM12	63		10-C8	
MM13	65		8-B6	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
MM14	66		8-B6	
MM15	70		8-B6	
MM28	81		9-D8	
NEQUAL0/	214		6-A4	
NSHIFT		20	7-B1	
POWERFAIL		299	6-A4	
POWFAIL/	296		6-A5	
PROP0/	208		11-B4	
PROPI/	207		11-B4	
PROP21/	10		11-B4	
PROP31/	210		11-A4	
QLSBSL		233	10-C4	
QMODES0		11	11-B5	
QMODES1		8	11-B5	
QMSBSR		231	10-D4	
Q-MSB-DP	40		10-C5	
Q00	12		10-B5	
Q15	31		10-B5	
READCYCLE	240		12-D7	
RESYNC-10		97	5-B2	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
SETSM110/		219	10-B1	
SETSM214/	277		8-C8,13-C5	
SETSM215/		300	6-B2	
SM107/	14		10-D2	
SM109	295		6-B3	
SM112/	15		10-D2	
SM113/	71		13-C5,7-D3	
SM113/MM/		72	13-C4	
SM207	220		7-C8	
SM211	267		12-C8	
SM214	64		13-B5	
SUB-ADSPT/		216	11-C2	
S150/		48	13-D1	
S151/		249	13-D1	
S152/		247	13-C1	
S100	221		10-D3	
S2-SHIFT	217		8-D7,10-D6	

NOTES (UNLESS OTHERWISE SPECIFIED)

NCR-DPD FORM NO. E-1247

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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA		
UNIT: PROCESSOR		
NAME: SCHEMATIC-LOGIC, CONTROL 1		
SHEET 3 OF 13	DWG SIZE	96751018 LA
SCALE: NONE	B	315-0532515
7ERT		

UNLESS OTHERWISE
SPECIFIED, DIMENSIONAL
LIMITS ARE:
INCH NOMINAL
.XX ±.
.XXX ±.

Figure 1-5. Control 1 (PWA 96751017) Logic Diagram (Sheet 4 of 14)



(25,4)mm
1 INCH

S-92290-SIC
81015L96

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ ZONE	REMARKS
S2S0/		67	13-B6		XTBLKT4/	274		9-D8						
S2S1/		292	13-B6											
S2S2/		273	13-B6											
S200	21		10-D3											
S201	16		10-D2											
S6CONSI		204	7-D4											
TEQUAL0/	241		5-C4											
T2-ODDCLK/		39	5-C5											
T3-MEM//		37	5-B3											
T4-T5/		218	5-C3											
T0-/		29	5-D5											
T1-		6	5-B5											
T2-		3	5-D2											
T3-		74	5-B5											
T3--		99	5-B5											
T4-		75	5-B2											
WEFI		279	9-A2											
WRT32BIT/	86		12-A8											

NOTES (UNLESS OTHERWISE SPECIFIED)

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±
.XXX ±

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NCR		DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA	
UNIT: PROCESSOR			
NAME: SCHEMATIC-LOGIC, CONTROL 1			
SHEET 4 OF 13	DRG SIZE	96751018 A	
SCALE: NONE	B	315-0532515	
		7ERT	

NCR-DPD FORM NO. E-1267

Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 5 of 14)

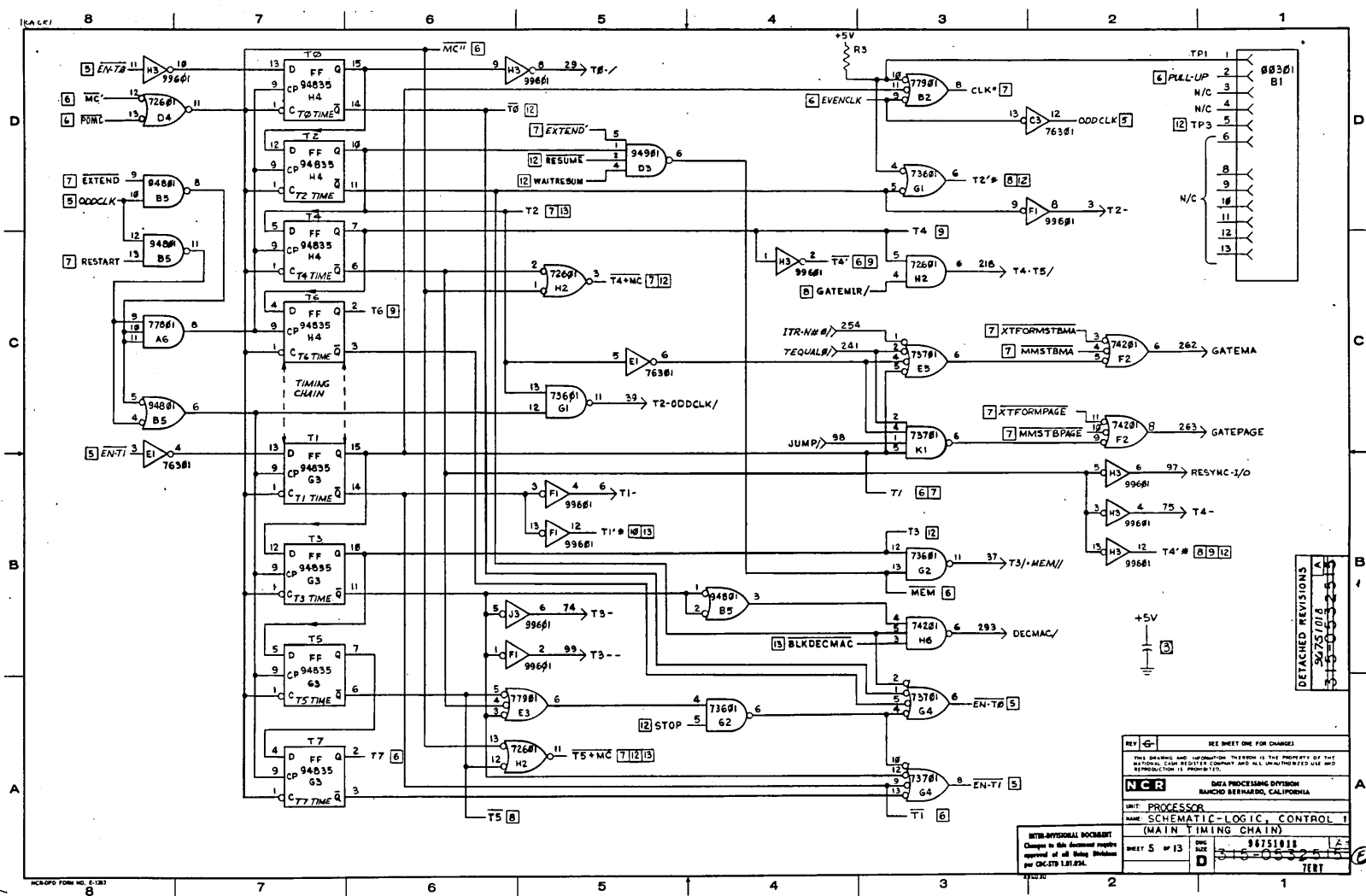


Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 6 of 14)

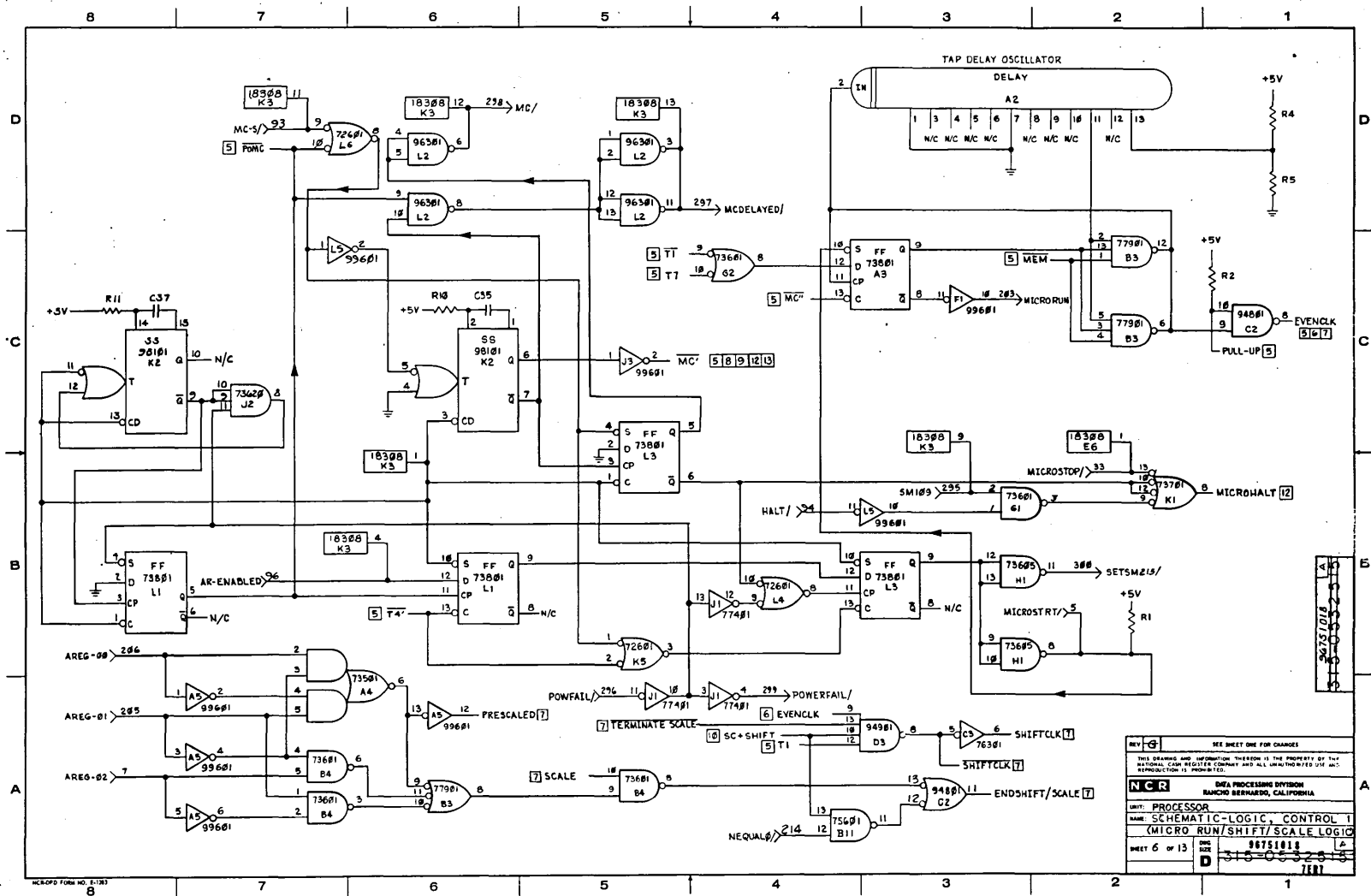


Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 7 of 14)

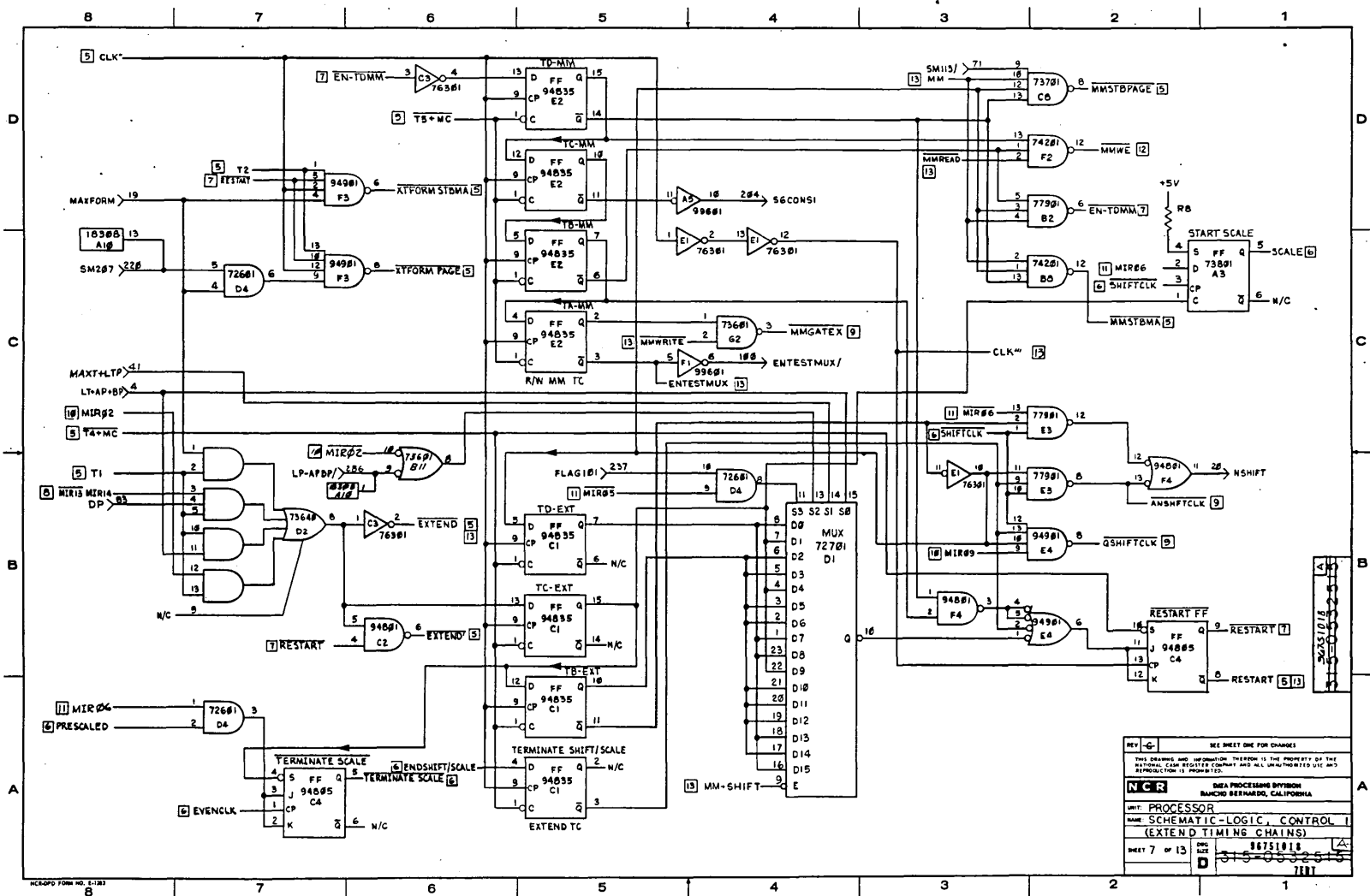


Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 8 of 14)

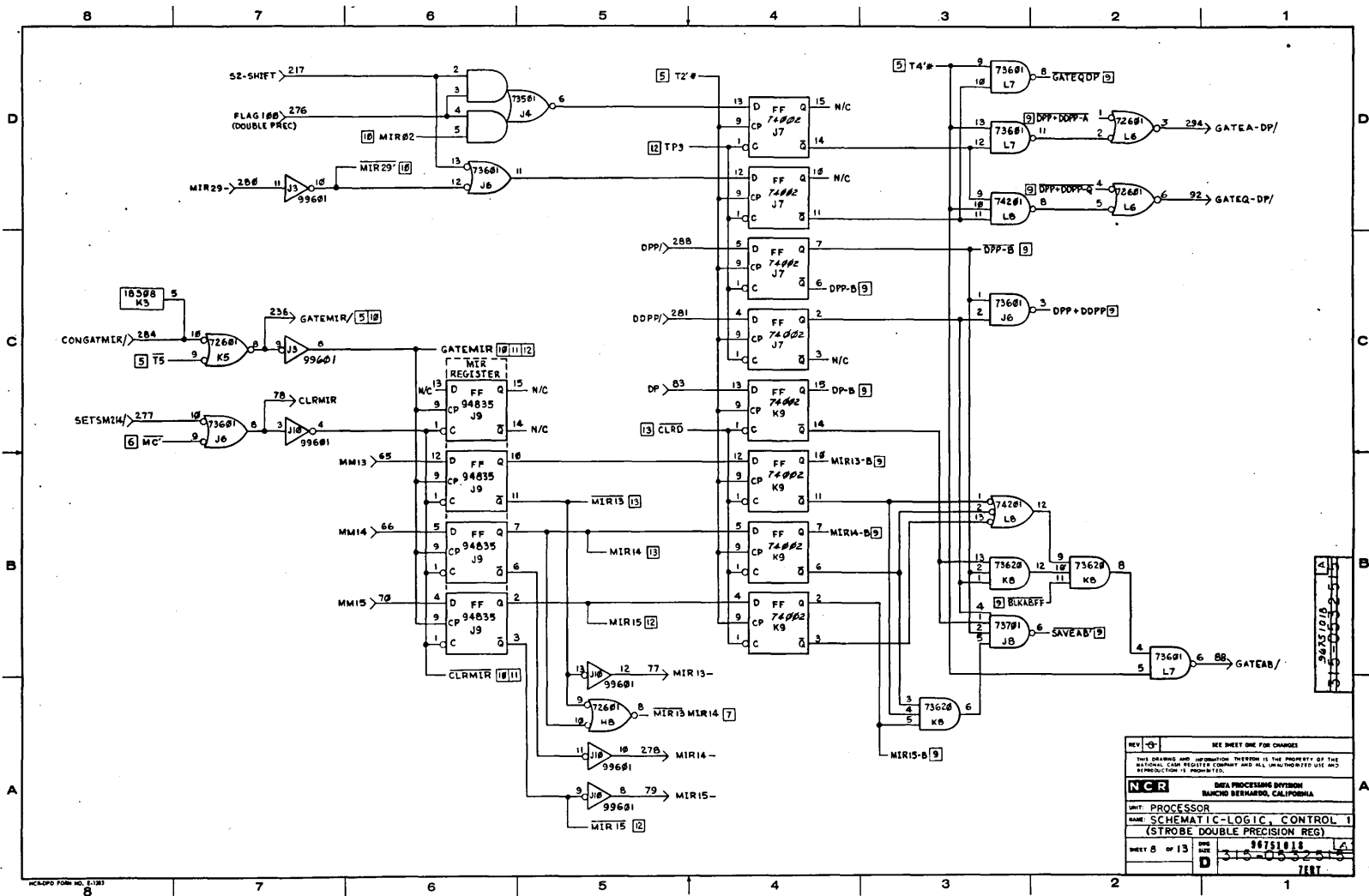


Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 9 of 14)

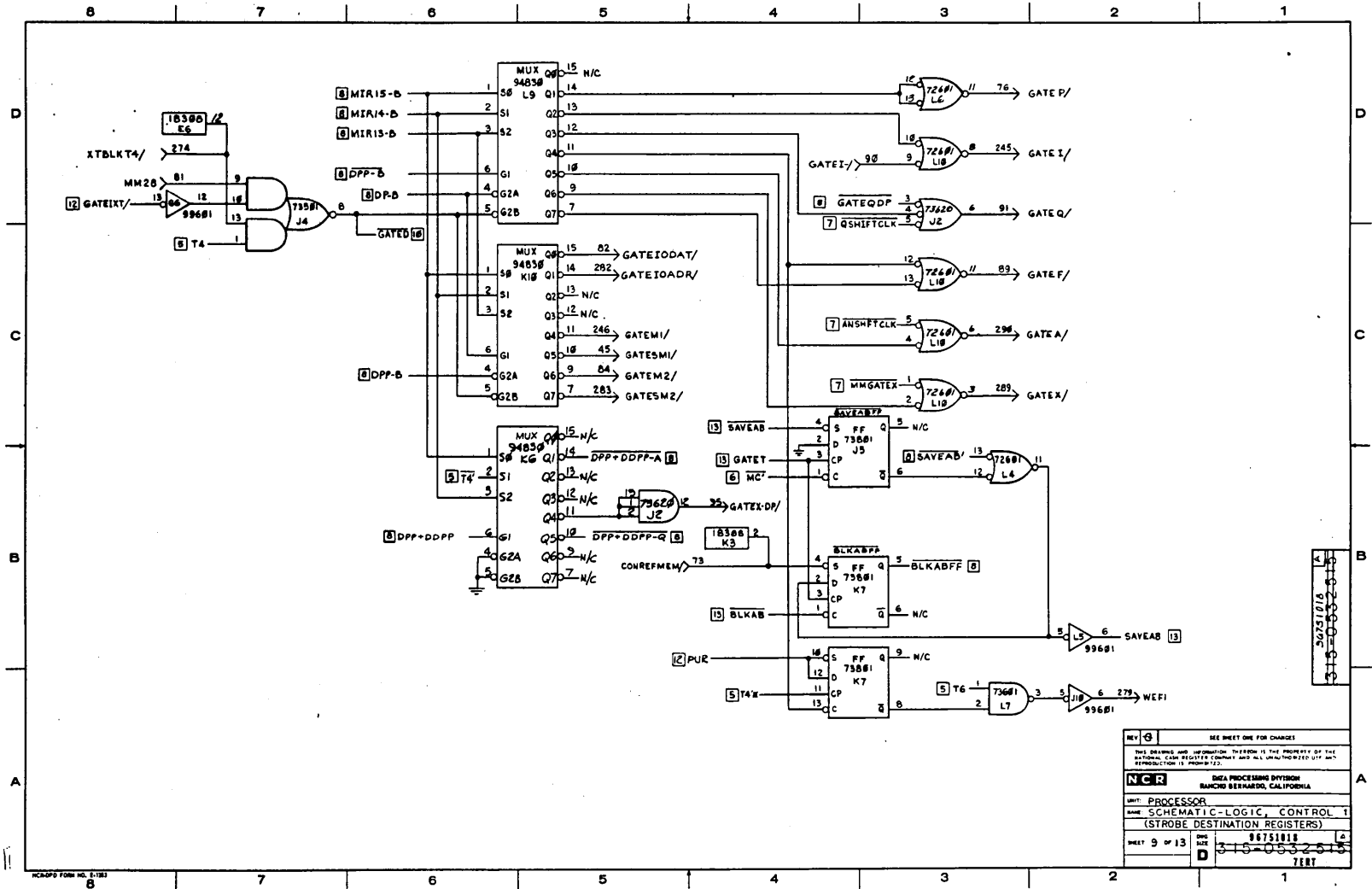


Figure 1-5. Control 1 (PMA 96751017) Logic Diagram (Sheet 10 of 14)

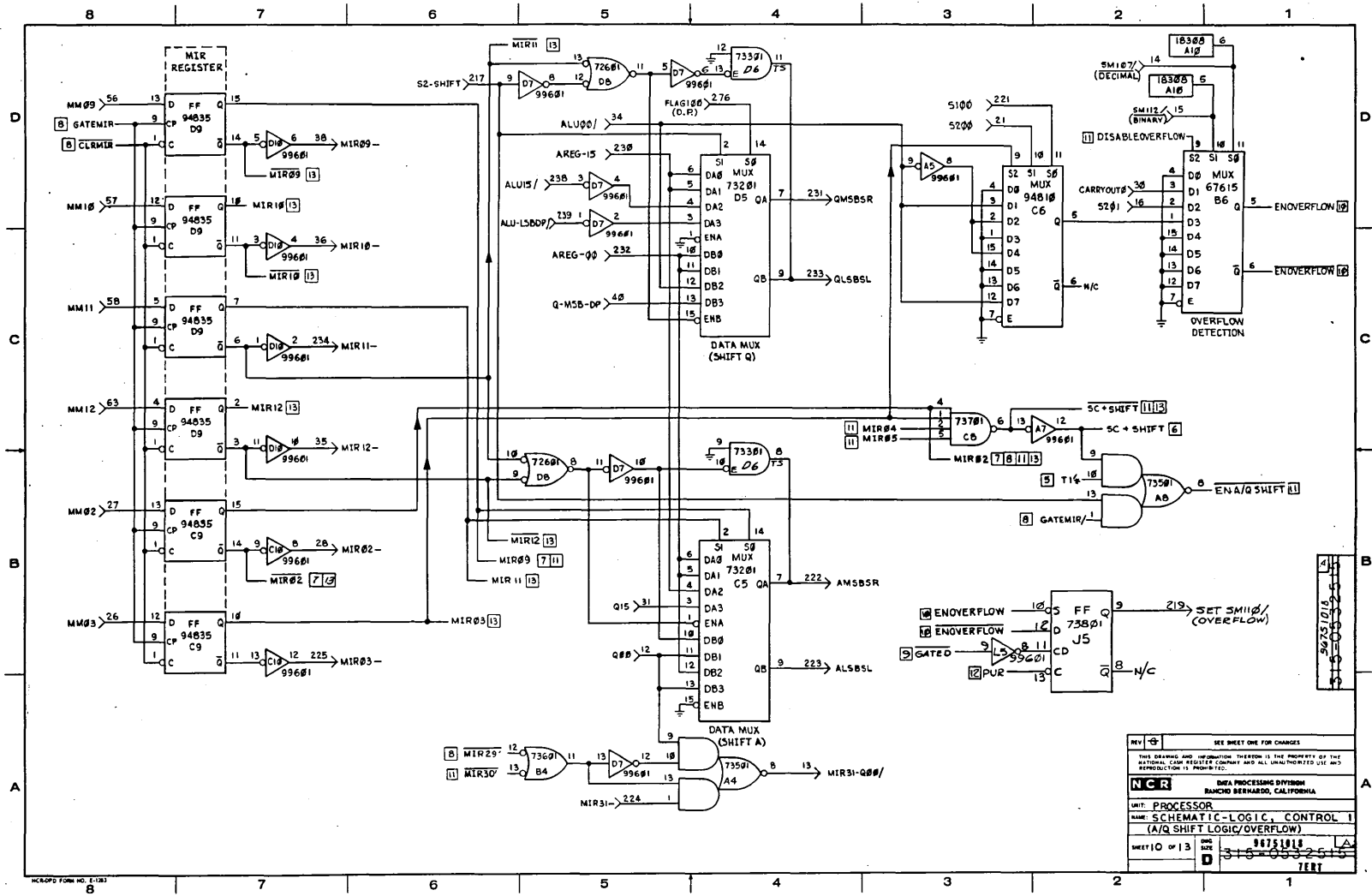
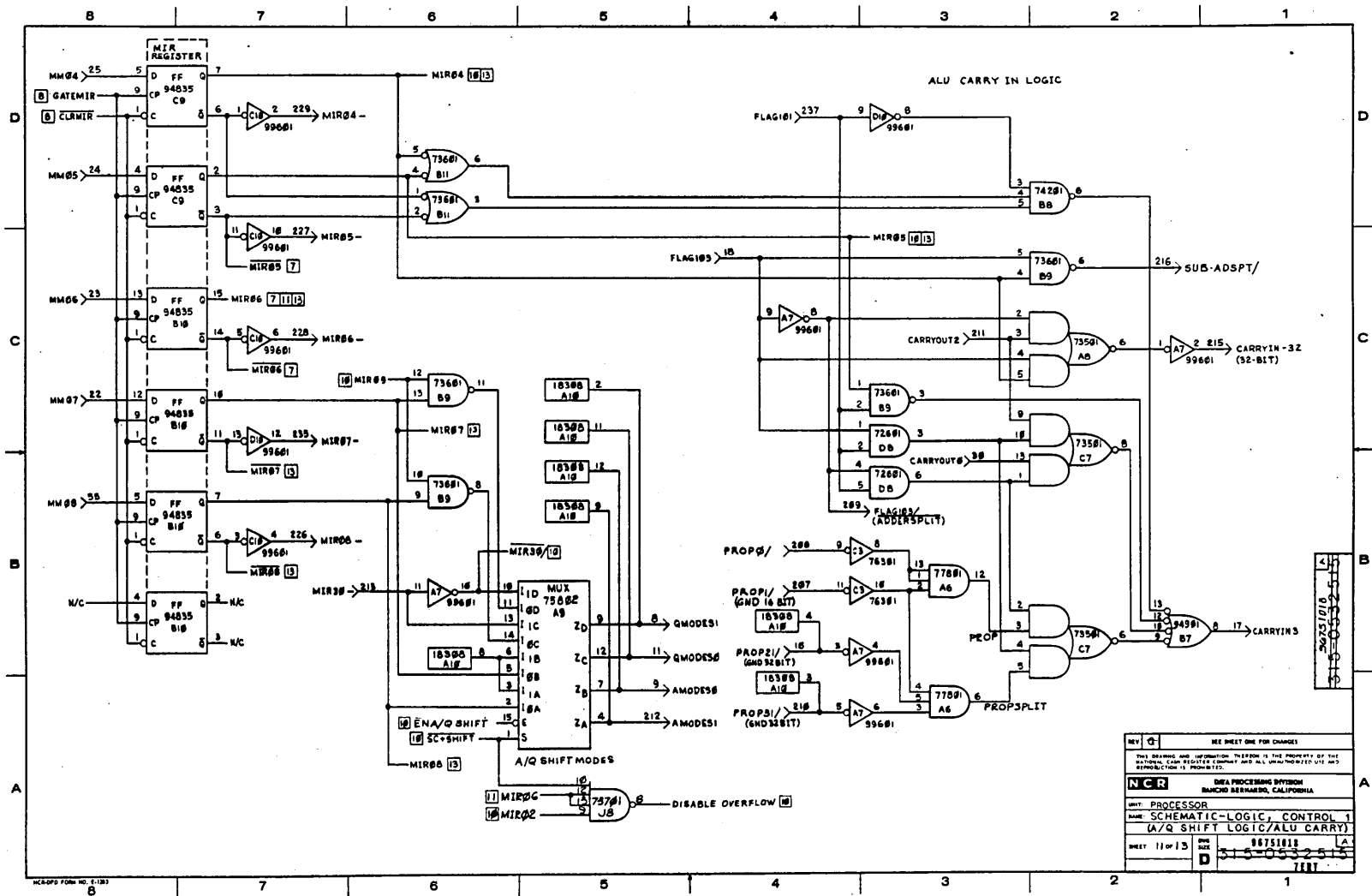


Figure 1-5. Control 1 (PWA 96751017) Logic Diagram (Sheet 11 of 14)



MAIN MEMORY RESUME LOGIC

UNIT: PROCESSOR

NAME: SCHEMATIC-LOGIC, CONTROL 1 (MAIN MEMORY RESUME LOGIC)

DATE: 8/75/1018

SHEET 12 OF 13

TEST

Figure 1-5. Control 1 (PWA 96751017) Logic Diagram (Sheet 14 of 14)

AA3100 REV. 8/71

Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 1 of 20)

SIGNAL	PIN	EXP. NO.	SIGNAL	PIN	EXP. NO.	SIGNAL	PIN	EXP. NO.	SIGNAL	PIN	EXP. NO.
REQUALB	214	0115	FLAG1C	222	0112	MIR26-	230	0108	S8-0	70	0109
A-EQUALB-/	215	0115	FLAG2C/	59	0112	MIR27-	32	0108	S8-1	71	0109
ALU00/	86	0115	FLAG102	250	0118	MIR28-	280	0108	S8-2	272	0109
AP	217	0117	FLAG60/	244	0114	MIR29-	277	0108	S8-3	269	0109
AP/+T0	211	0117	FLAG61/	240	0114	MIR30-	279	0108	S8-4	87	0109
			FLAG62/	93	0114	MIR31-	281	0108	S8-5	88	0109
B60/	58	0118	FLAG63/	297	0114	MM00	28	0107	S8-6	92	0109
B61/	256	0118				MM01	31	0107	S8-7	90	0109
B62/	255	0118	GATEI-/	7	0117	MM16	40	0107	S8ENABLE/	287	0114
B63/	54	0118	GATEIXT-/	25	0112	MM17	41	0107			
B64/	57	0118	GATELBDS/	213	0112	MM18	49	0107	T0-/	210	0117
B65/	56	0118	GATEMA	98	0101	MM19	48	0108	T1-	212	0104
B66/	254	0118	GATEMEM/	3	0116	MM20	47	0108	T2-	296	0116
B67/	253	0118	GATEMIR/	278	0107	MM21	46	0108	T3-	62	0116
B6GP0/	261	0118	GATEPAGE	259	0103	MM22	45	0108	T4-	21	0116
B6GP1/	262	0118	GATEPG-	239	0113	MM23	42	0108	T4*TS/	22	0112
B6GP2/-32	53	0118	GATET/	228	0115	MM24	77	0107	T3/*MEM//	20	0113
B6GP3/-32	245	0118	GATEUBDS/	94	0112	MM25	78	0108	TEQUAL0/	38	0111
BP/	8	0111	HALT/	19	0111	MM26	79	0108			
BP/+T0	209	0117				MM27	80	0108	WEF2	205	0117
BP001/	27	0105	INTERRUPT/	263	0115	MM28	81	0108			
BTLM/	223	0115	ITR*NO/	289	0111	MM29	82	0108			
BTU/	13	0115				MM30	83	0108			
BUS04	35	0107	JUMP/	204	0113	MM31	84	0108			
BUS05	43	0107				M0DE11/	206	0113			
BUS06	44	0107	K0/	268	0109						
BUS07	34	0107	K1/	72	0109	NO/	292	0110			
BUS08	11	0105	K2/	271	0109	N1/	89	0110			
BUS09	50	0105	K3/	74	0109	N2/	85	0110			
BUS10	64	0105	K4/	270	0109	N3/	266	0110			
BUS11	67	0105	K5/	73	0109	N4/	265	0110			
BUS12	75	0106	K6/	91	0109	N5/	65	0110			
BUS13	76	0106	K7/	293	0109	N6/	63	0110			
BUS14	10	0106	LOADMAC/	295	0101	N7/	264	0110			
BUS15	9	0106	LT*AP*BP	224	0117	NEQUAL0	234	0110			
						NSHIFT	208	0114			
CARRY0UTO	285	0115	MA0/	273	0102	NOT USED	288	0119			
CHAR0	249	0119	MA1/	68	0102	OSC4.9152	221	0112			
CHAR1	60	0119	MA2/	276	0102						
CHAR2-32	237	0119	MA3/	69	0102	P60/	283	0103			
CHAR3-32	238	0119	MA4/	282	0101	PG1/	258	0103			
CLRMIR	26	0107	MA5/	97	0101	PG2/	30	0103			
CPU-REQ/	242	0116	MA6/	96	0101	PG3/	267	0103			
CPU-SAVE/	99	0116	MA7/	95	0101	Q15	24	0115			
CPU-SC/	235	0119	MAXFORM	37	0112	Q-LSB-OP	14	0115			
CPU-WRITE	241	0116	MAXT+LTP	260	0119	READCYCLE	203	0116			
CPUWRPRTBT	248	0119	MCDelayed/	218	0114	SAMPINTS/	220	0115			
			MC-S/	236	0116	SM110	12	0115			
D0PP/	226	0111	MEMCYCLE/	243	0116	SM113/*MM/	18	0104			
DECMAC/	294	0101	MICR0RUN	291	0112	SM207	4	0111			
DP	6	0117	MIR00-	216	0107	S2-SHIFT	207	0117			
DPP/	5	0111	MIR01-	17	0107	S3S0/	16	0117			
			MIR16-	231	0107	S3S1/	23	0117			
ENNEBUS/	61	0116	MIR17-	232	0107	S5-0/	66	0105			
ENMM	233	0115	MIR18-	227	0107	S5-1/	274	0105			
ENMML	55	0115	MIR19-	33	0108	S5-2/	290	0105			
ENMMU	257	0115	MIR20-	39	0108	S5-3/	275	0105			
ENN/K/	219	0104	MIR21-	246	0108	S5-4/	299	0106			
ENTESTMUX/	15	0115	MIR22-	36	0108	S5-5/	298	0106			
			MIR23-	247	0108	S5-6/	284	0106			
			MIR24-	229	0107	S5-7/	286	0106			
			MIR25-	29	0108	S6CONS1	225	0104			

REV	ECN	DESCRIPTION	BY	DATE	APP
0	DS21338	REDRAWN	DL	11-20-78	APL
1	DS22123	CHG SW15 PER ECO	DL	7-23-81	APL

NOTES: UNLESS OTHERWISE SPECIFIED
 NO ELEMENT IDENTIFIER IS AVAILABLE FOR 74H51.

CONTROL 2 PWA 88909400		DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037		TITLE CONTROL 2	
FIRST USED ON CIR DATE DESIGNED BY APPROVED BY	LINVILLE 8 SEP 78 6 SEP 78 10-5-78 11-2-78	C 09132	96744232	SHEET 1 OF 20	7EKT

Figure 1-6. Control 2 (PMA 88909400) Logic Diagram (Sheet 2 of 20)

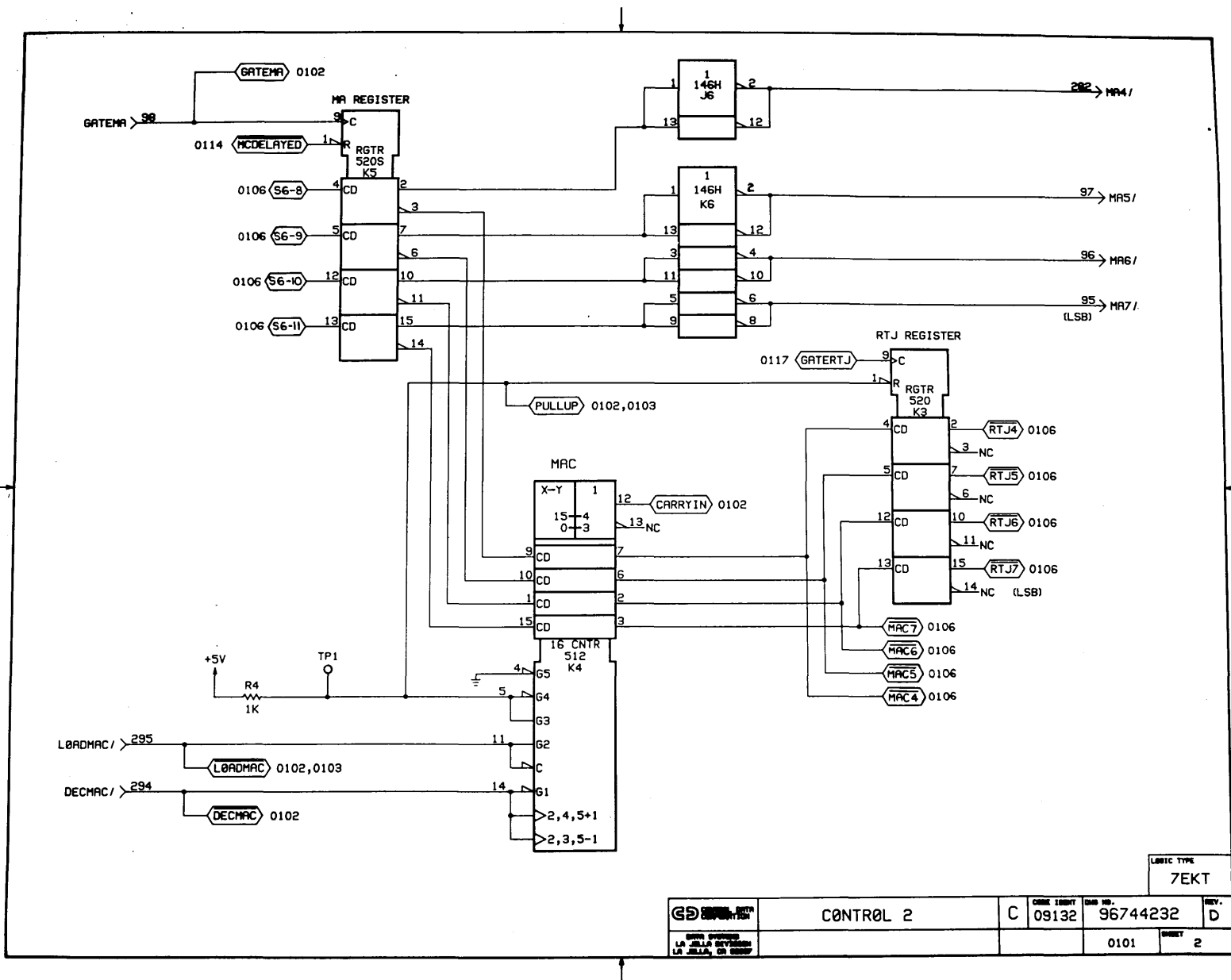
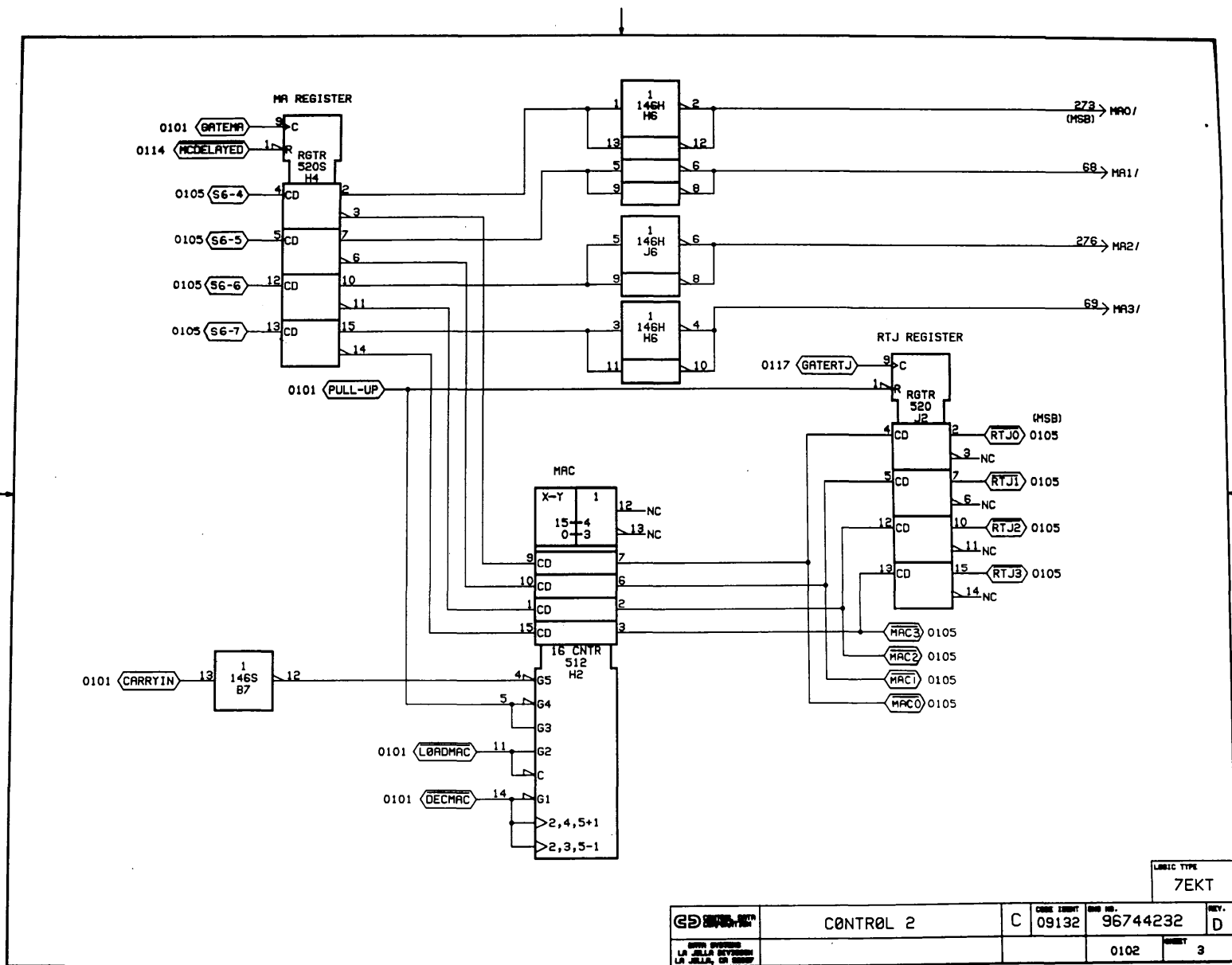


Figure 1-6. Control 2 (PMA 88909400) Logic Diagram (Sheet 3 of 20)



7EKT		LABIC TYPE	
09132	C	96744232	REV. D
0102	3	C0NTR0L 2	

Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 4 of 20)

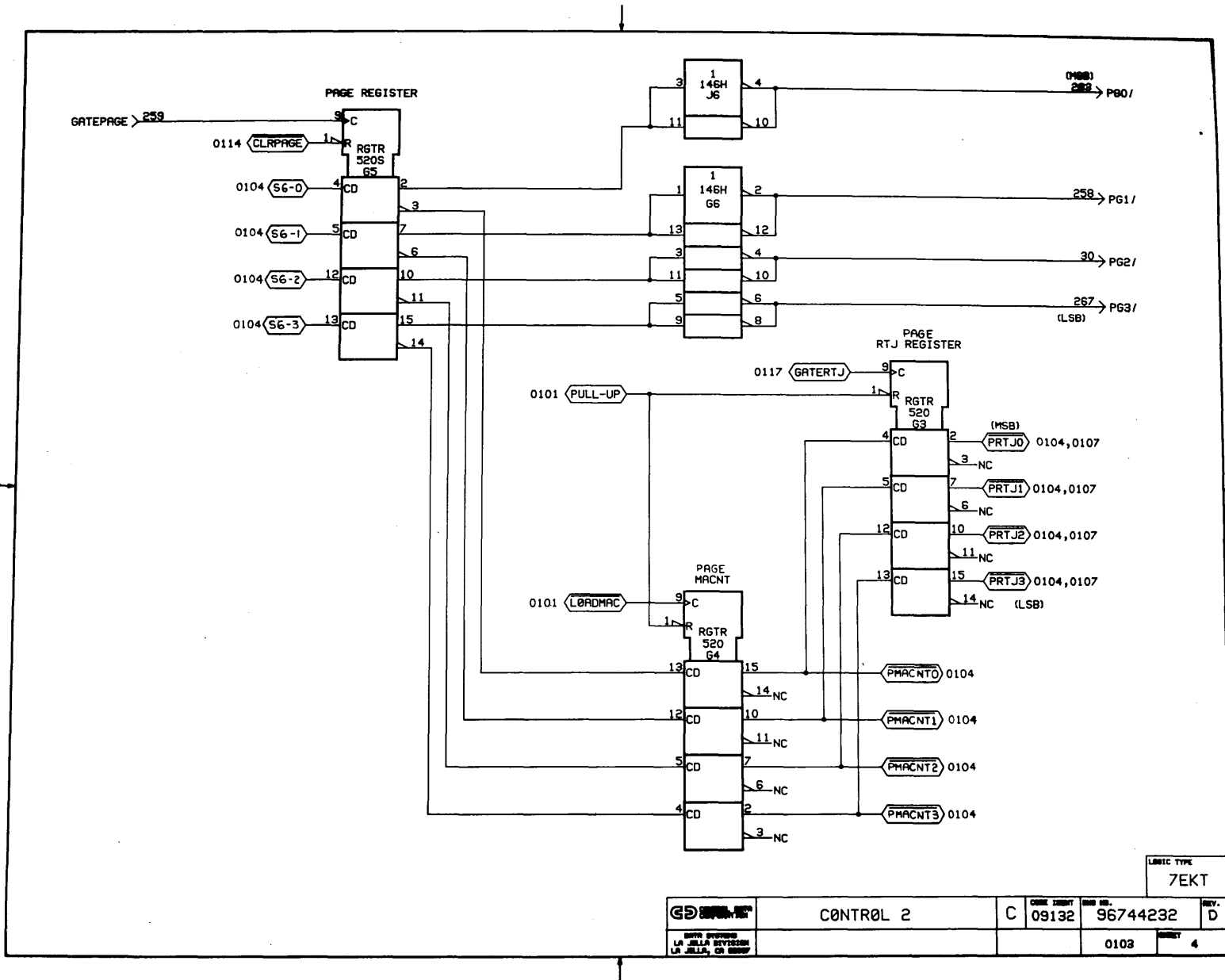
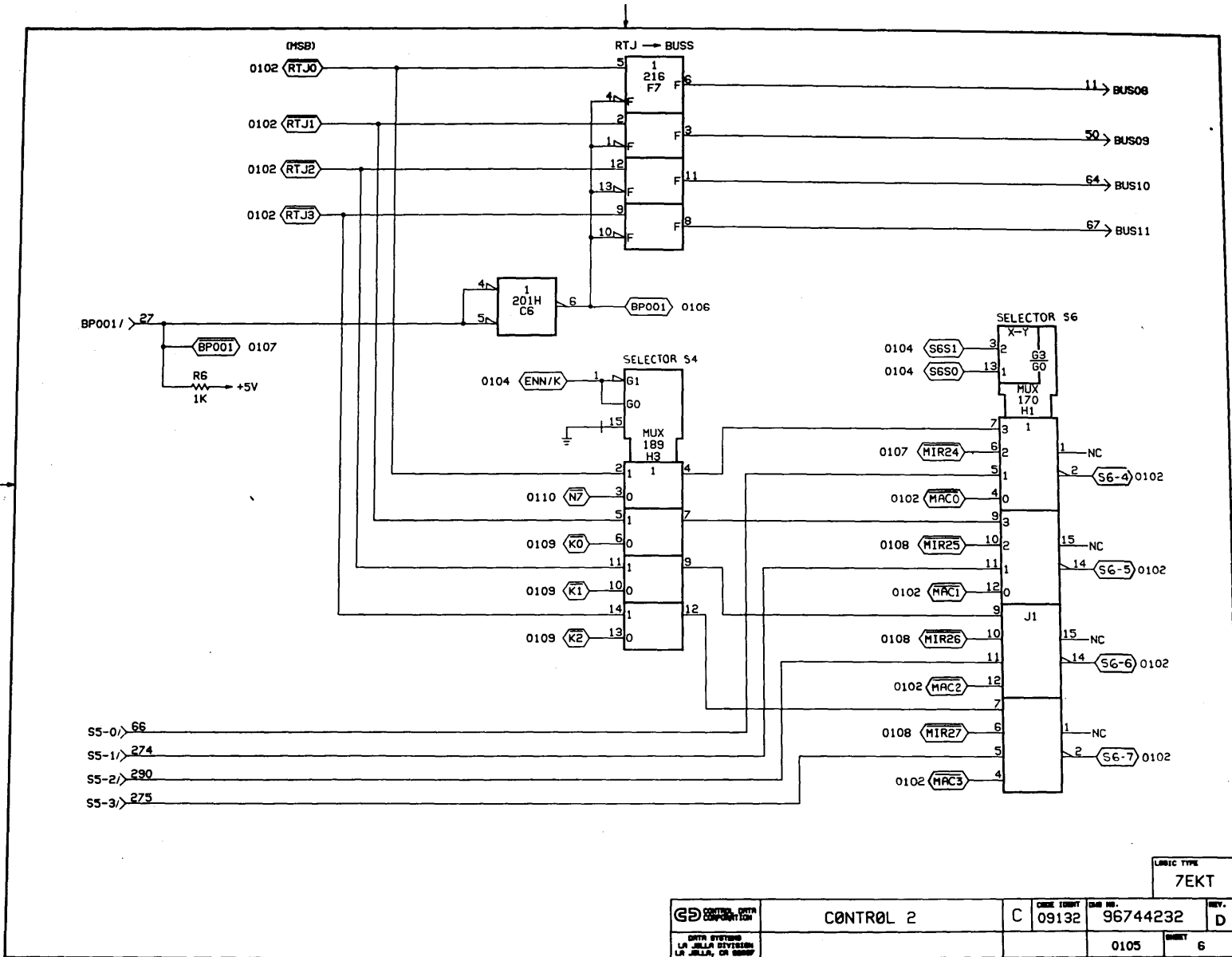
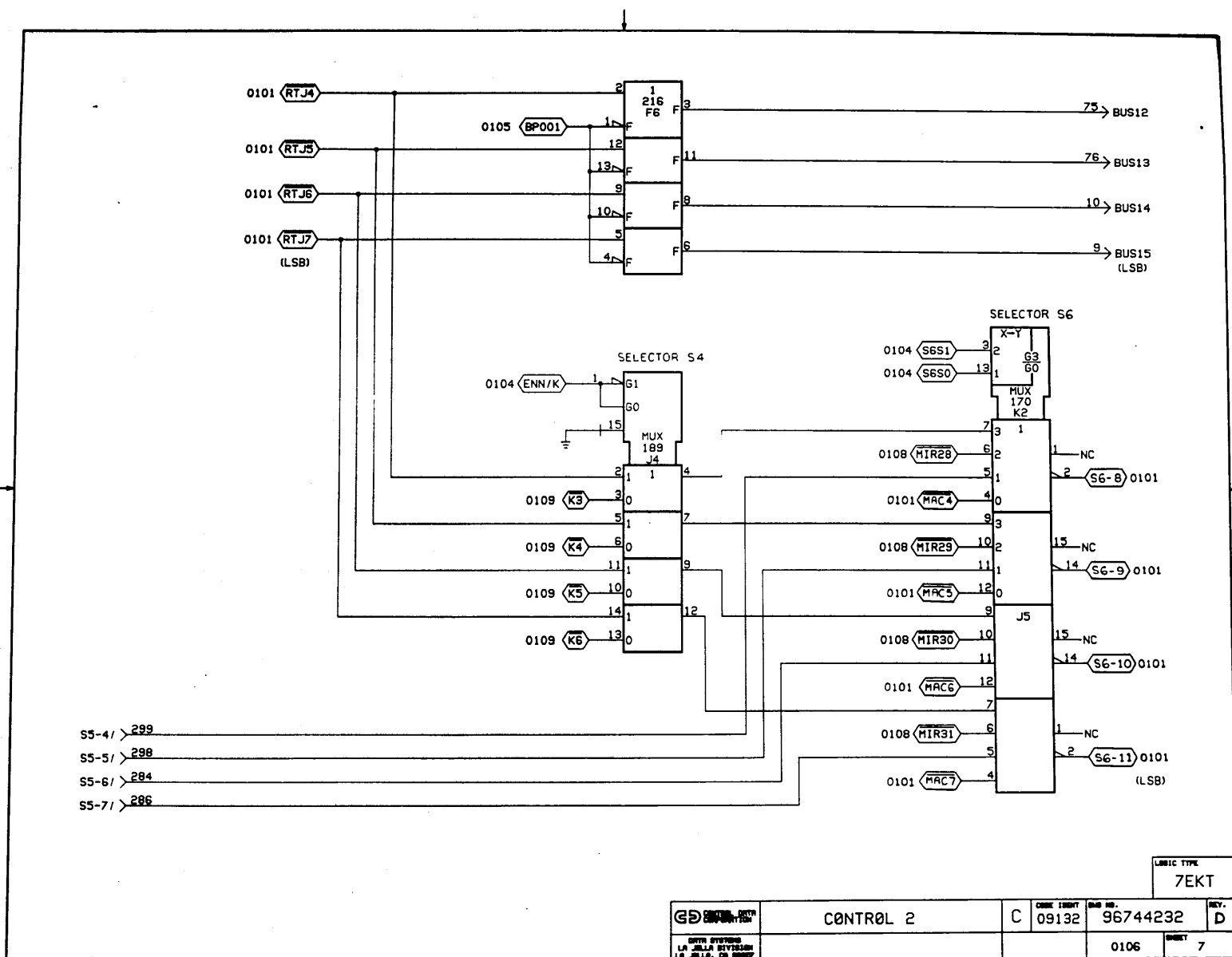


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 6 of 20)



CONTROL DATA CORPORATION		C		09132		96744232		D	
DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037		CONTROL 2		09132		96744232		D	
				0105		6			

Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 7 of 20)



				LOGIC TYPE	
				7EKT	
GD CONTROL DATA CORPORATION	CONTROL 2	C	CHINE TIGHT 09132	BAR NO. 96744232	REV. D
DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CALIF.				0107	SHEET 8

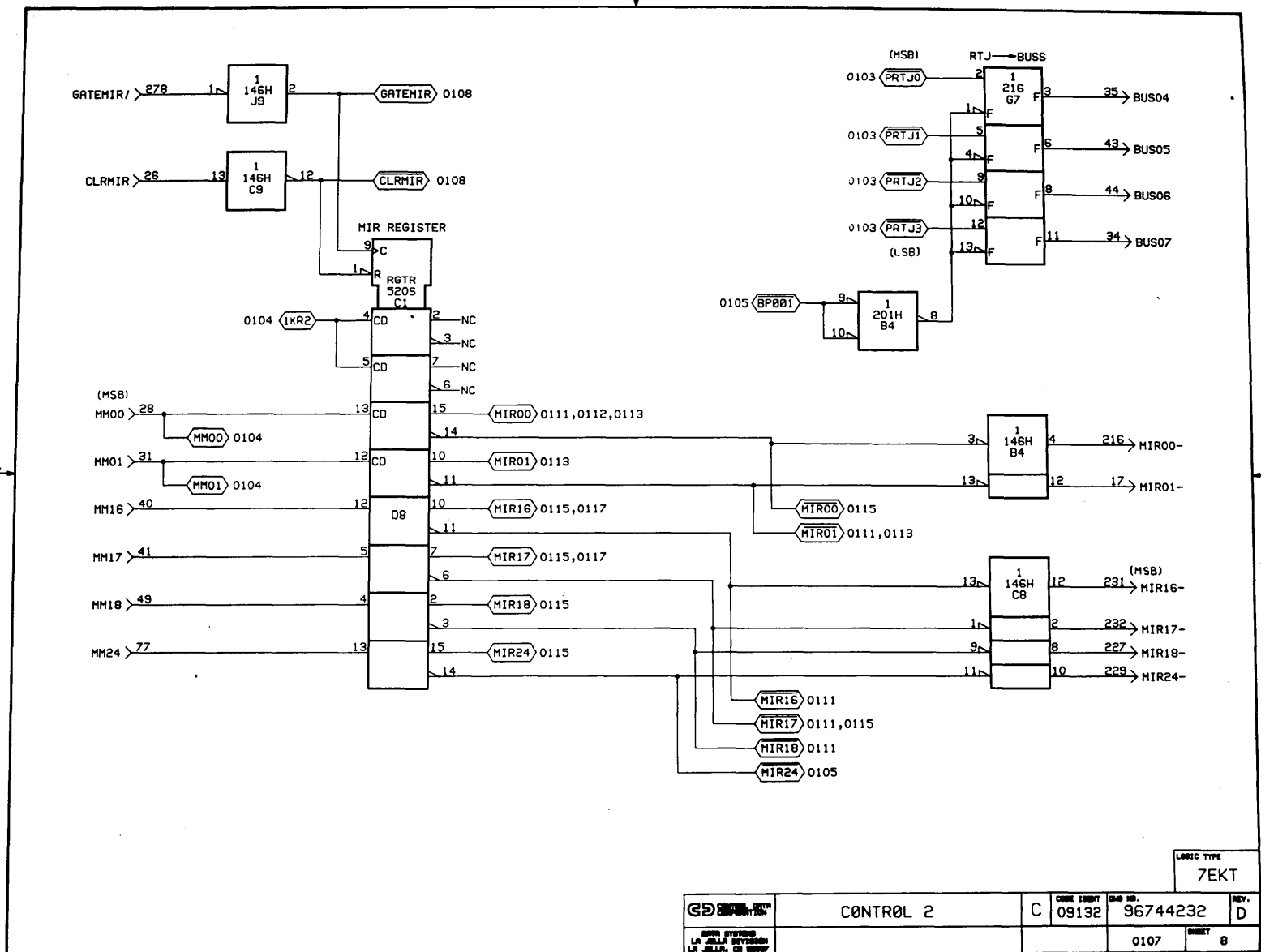


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 9 of 20)

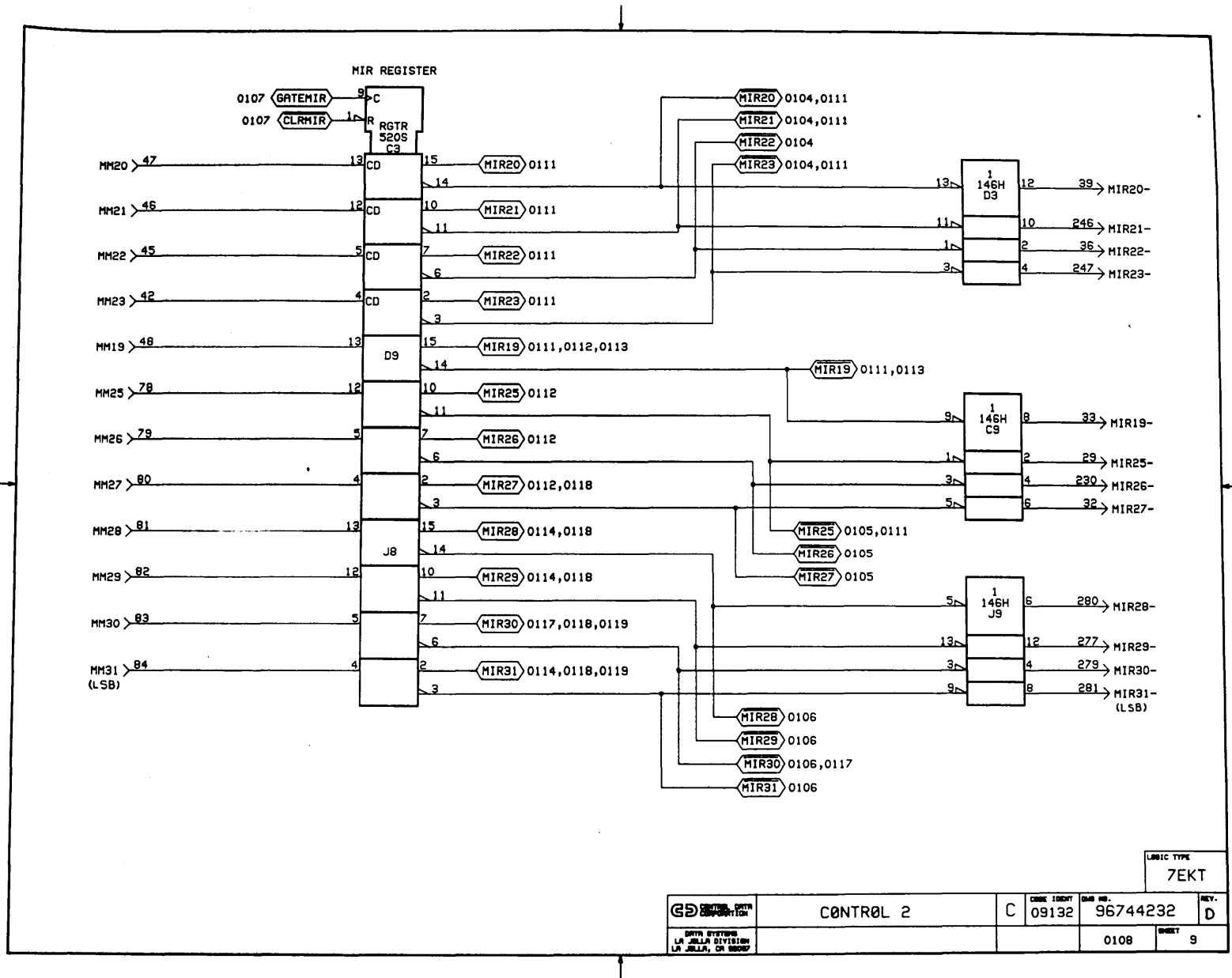


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 10 of 20)

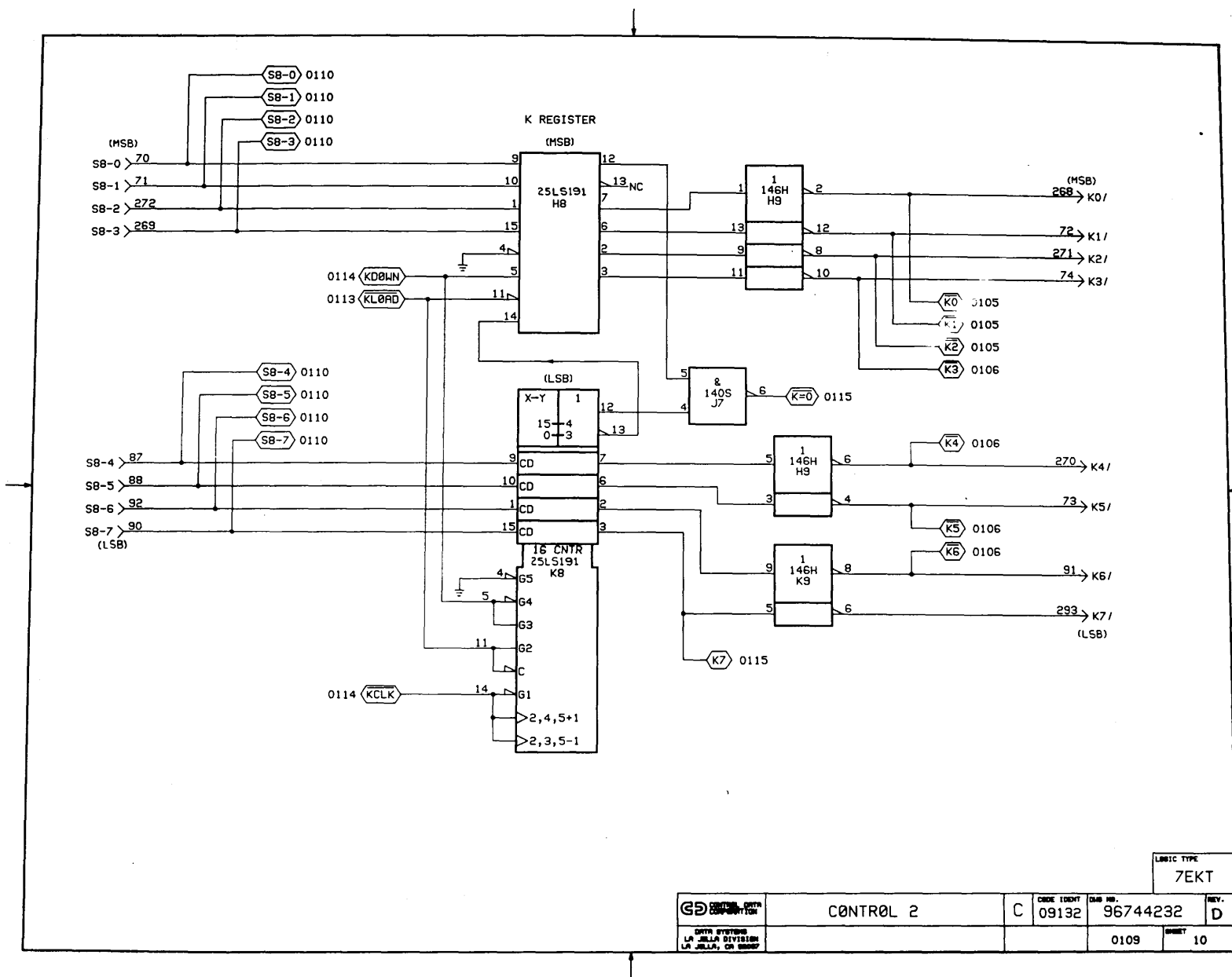


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 12 of 20)

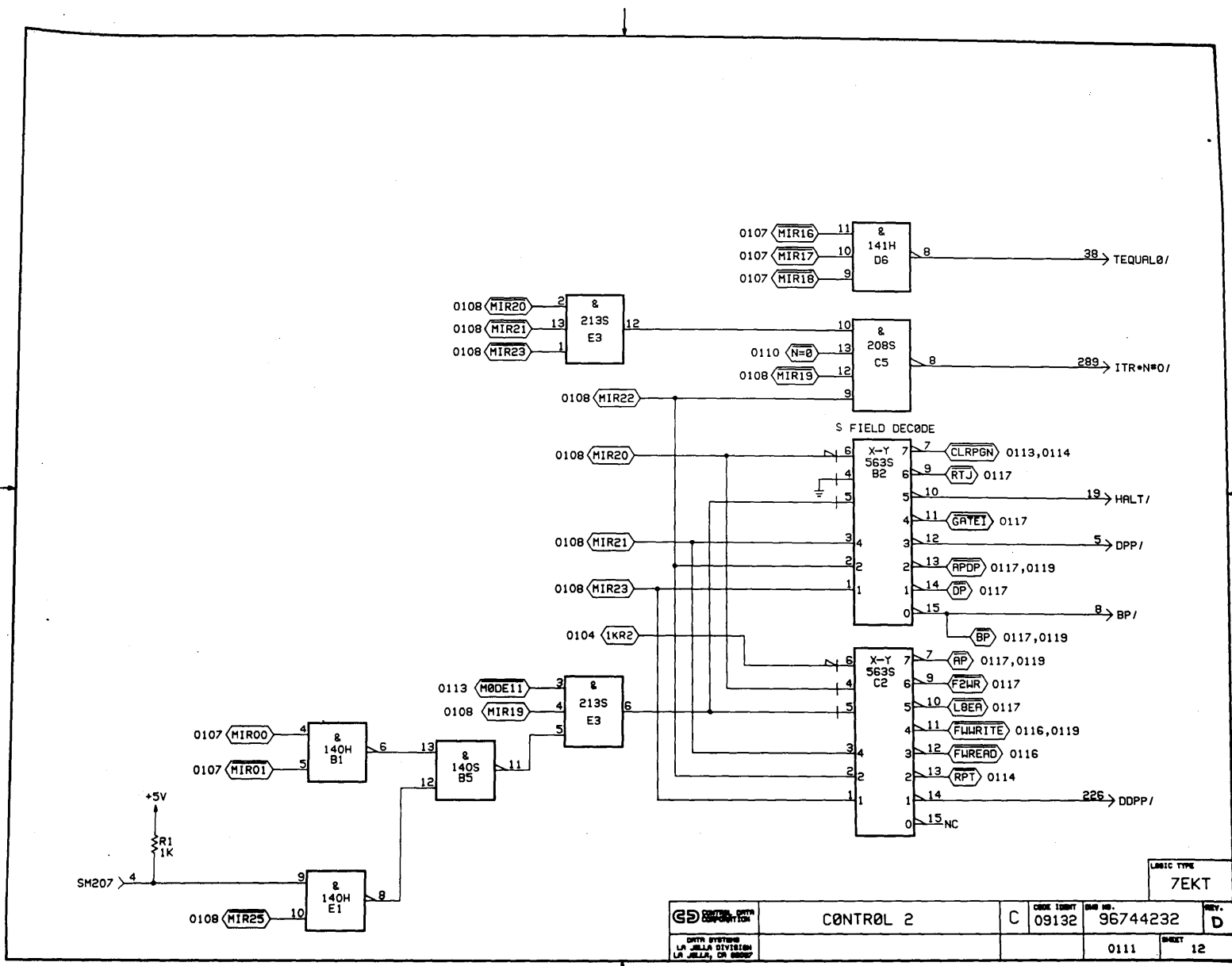


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 13 of 20)

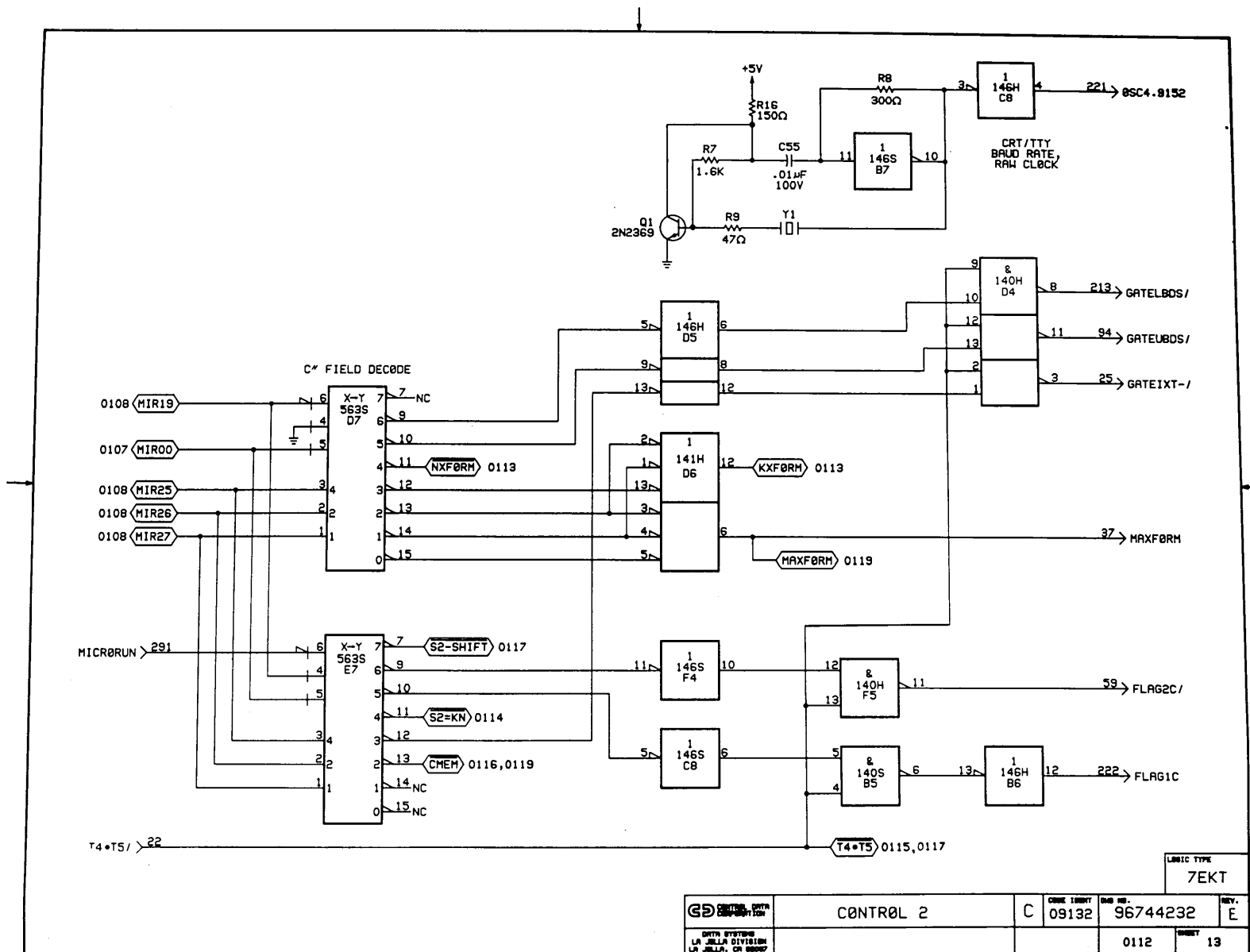


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 14 of 20)

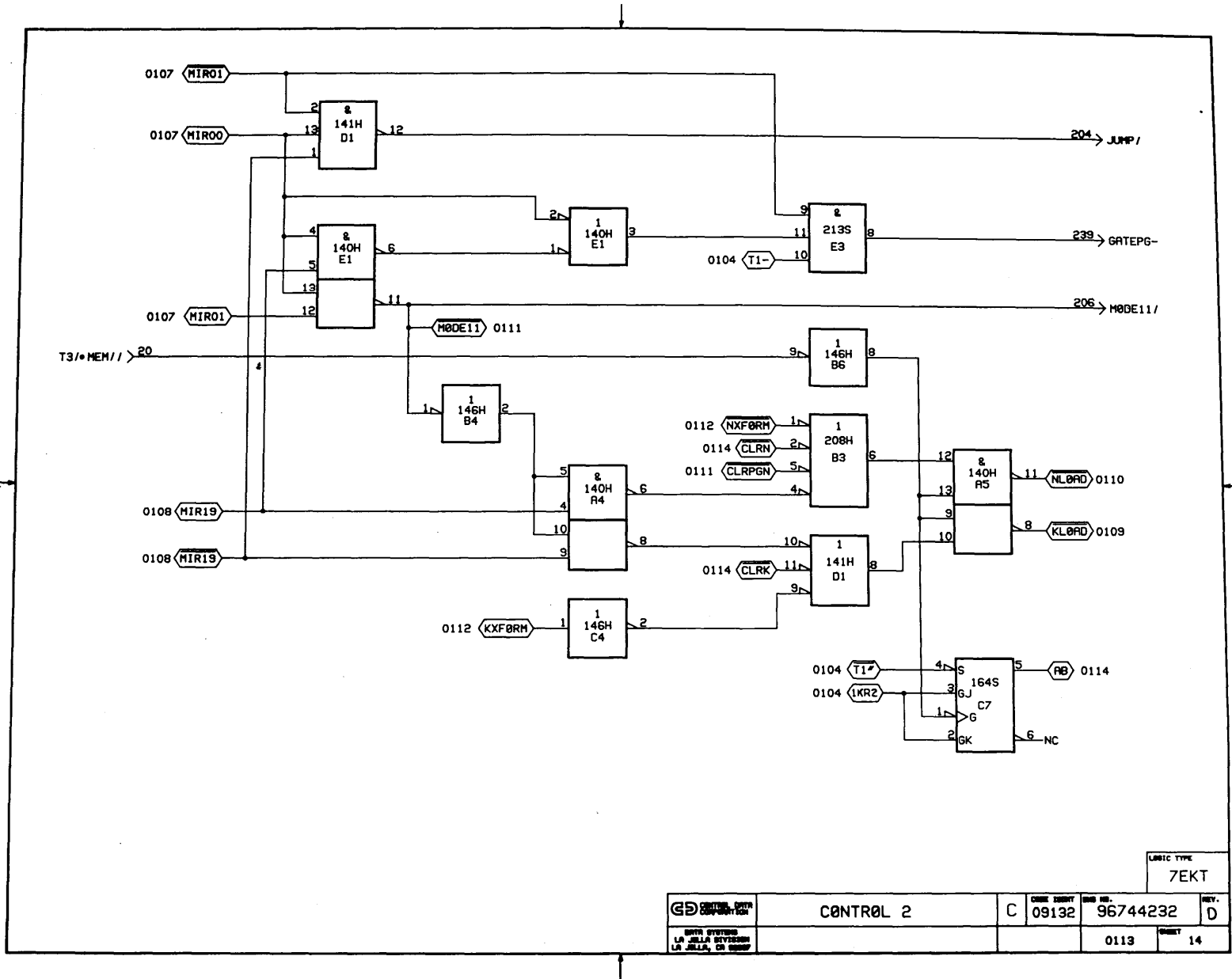


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 15 of 20)

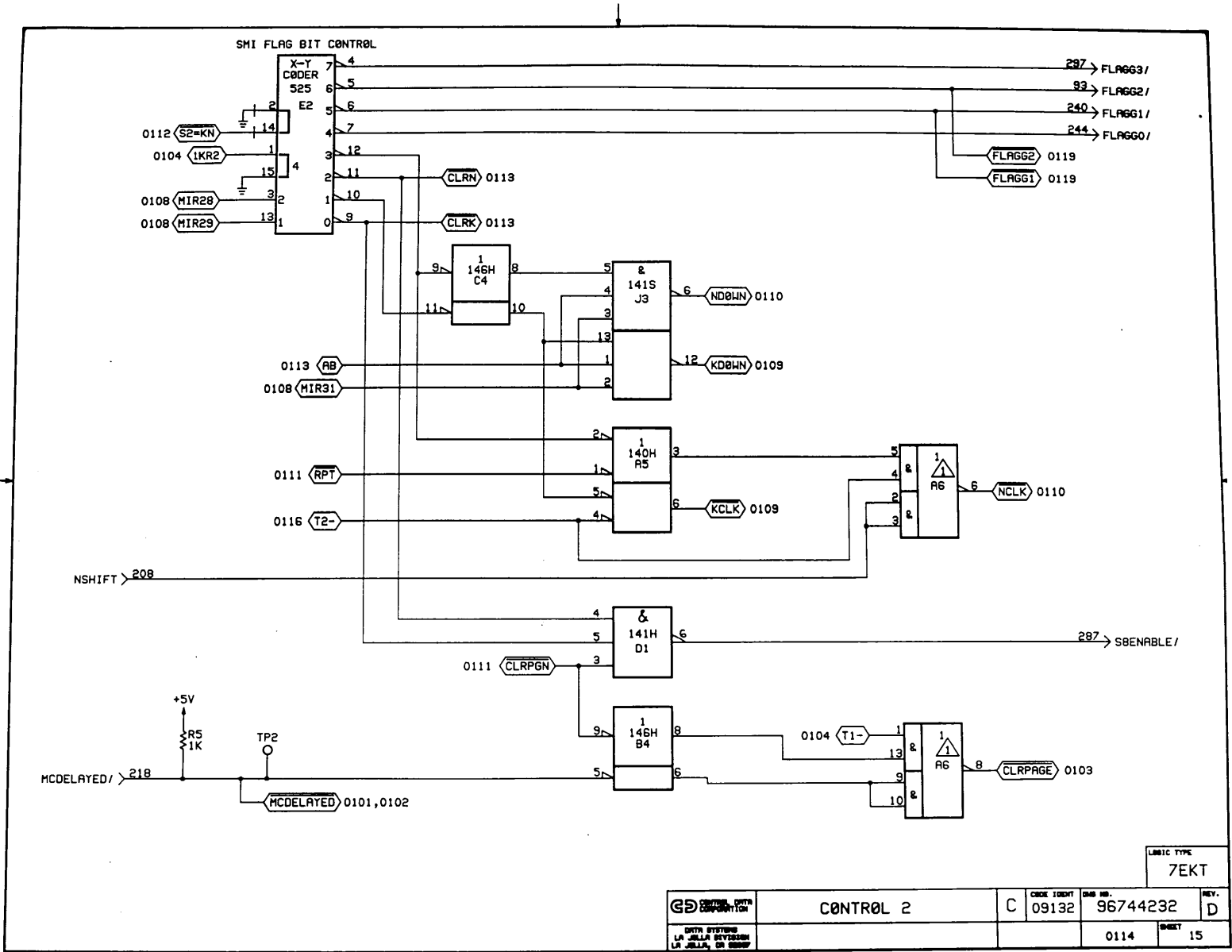


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 16 of 20)

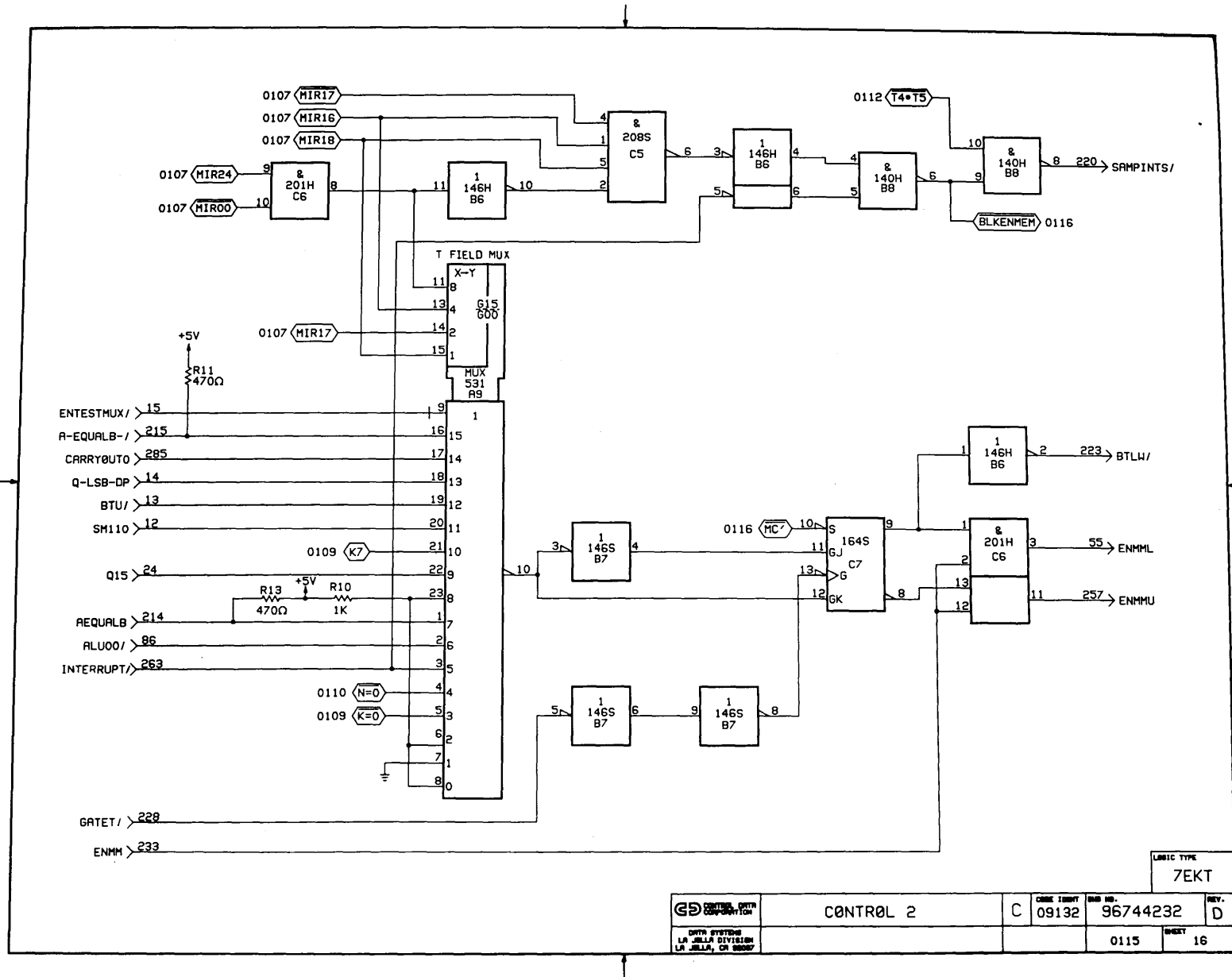
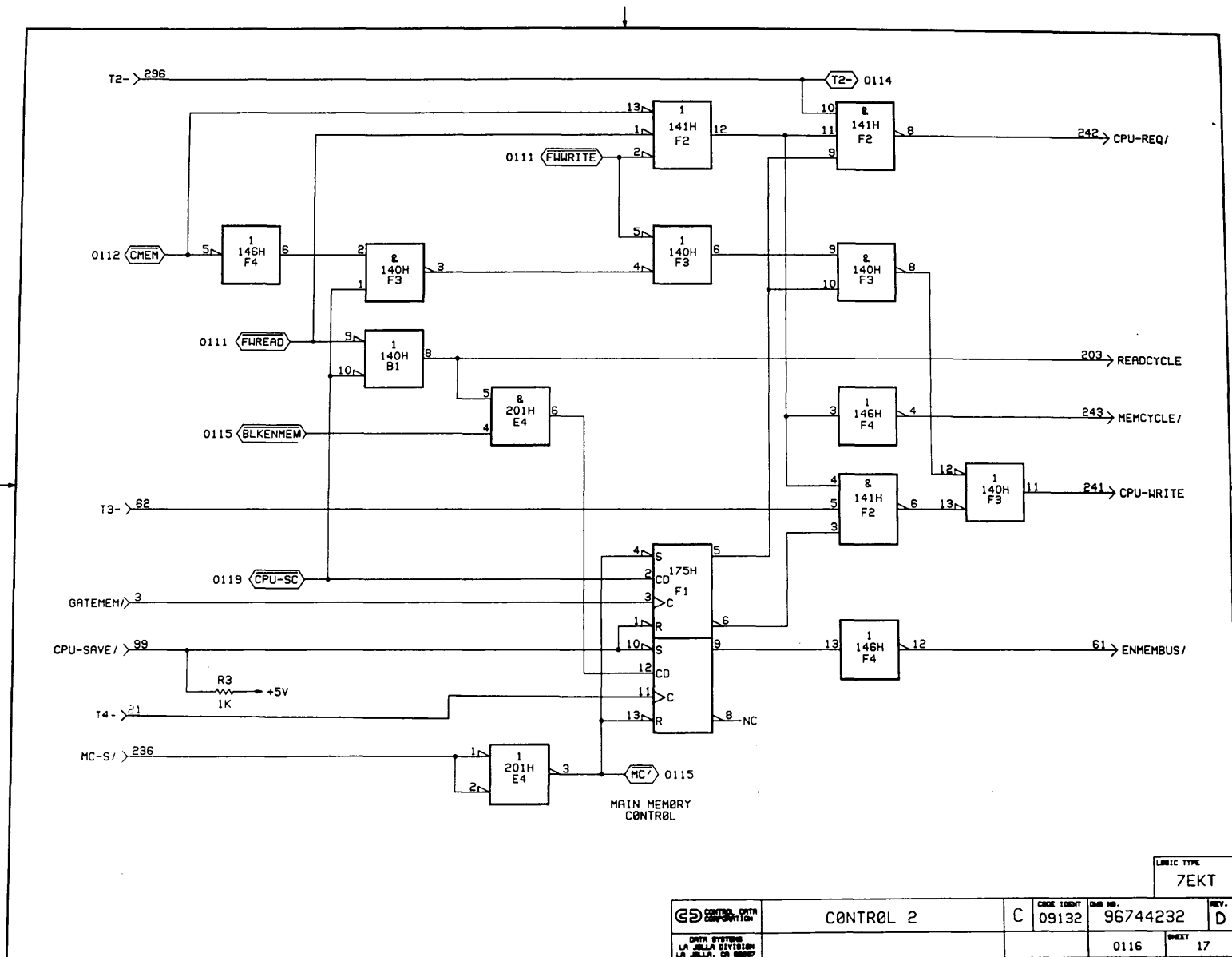


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 17 of 20)



GDD CONTROL DATA CORPORATION		C 09132		96744232		REV. D
DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037		0116		SHEET 17		

Figure 1-6. Control 2 (PMA 88909400) Logic Diagram (Sheet 18 of 20)

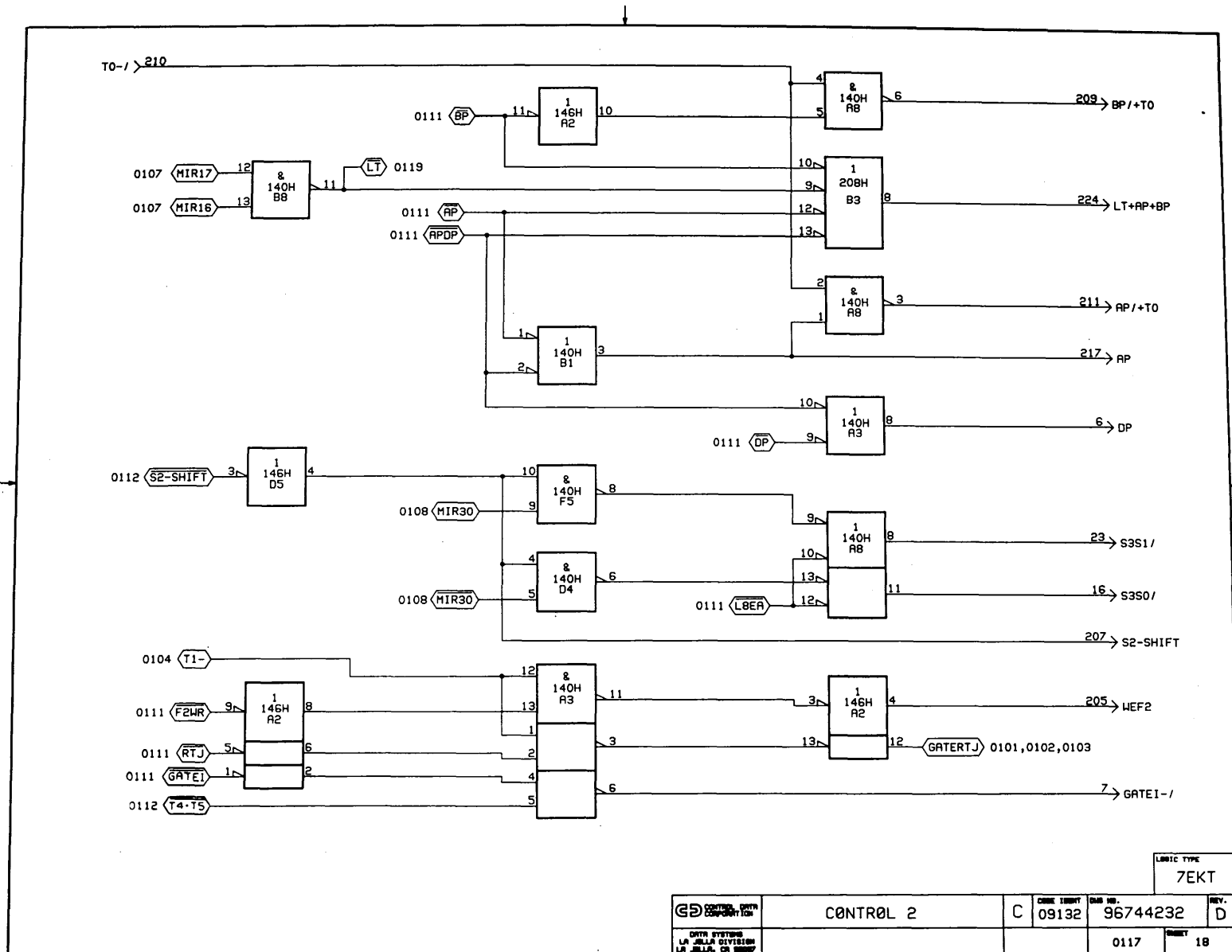


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 19 of 20)

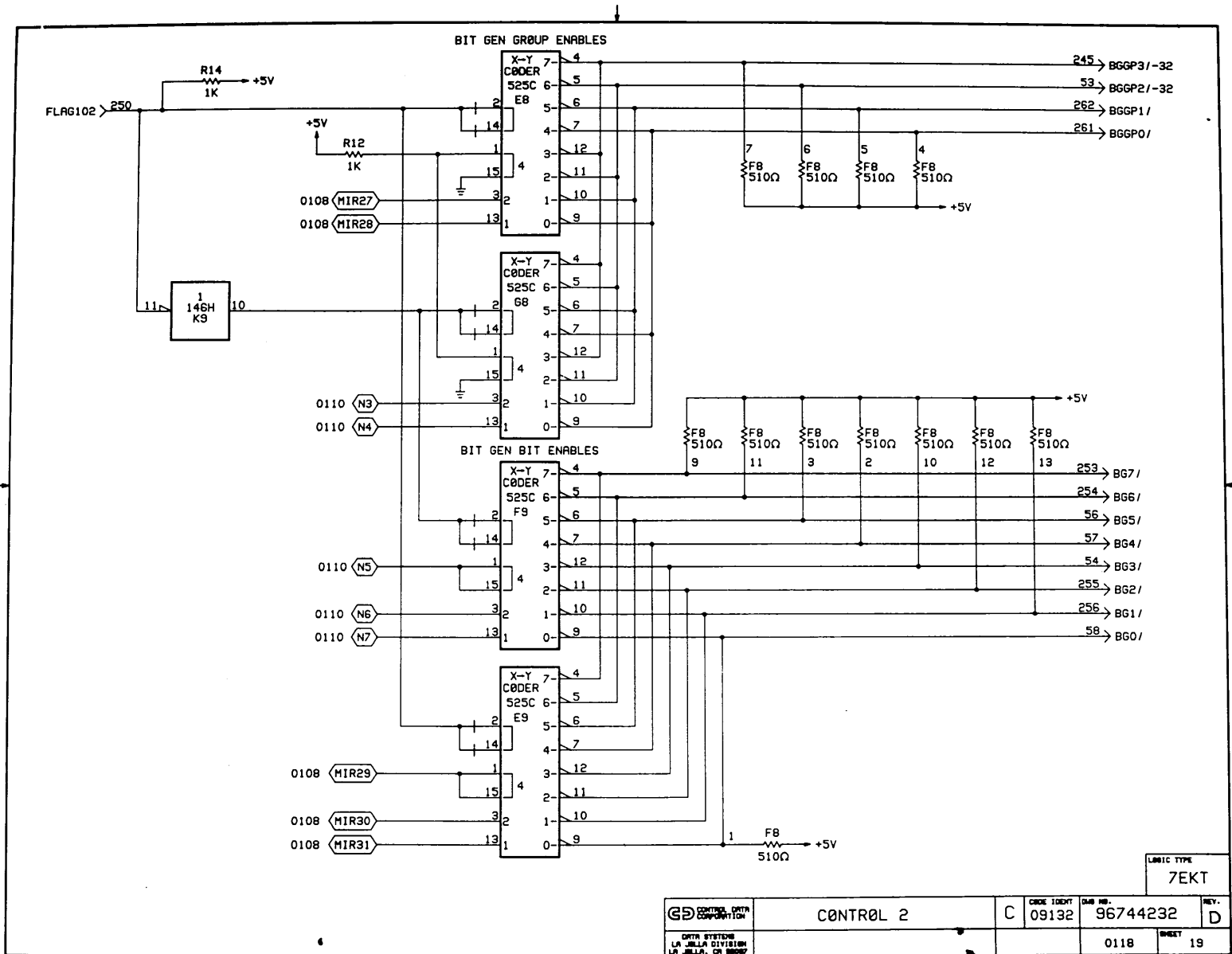


Figure 1-6. Control 2 (PWA 88909400) Logic Diagram (Sheet 20 of 20)

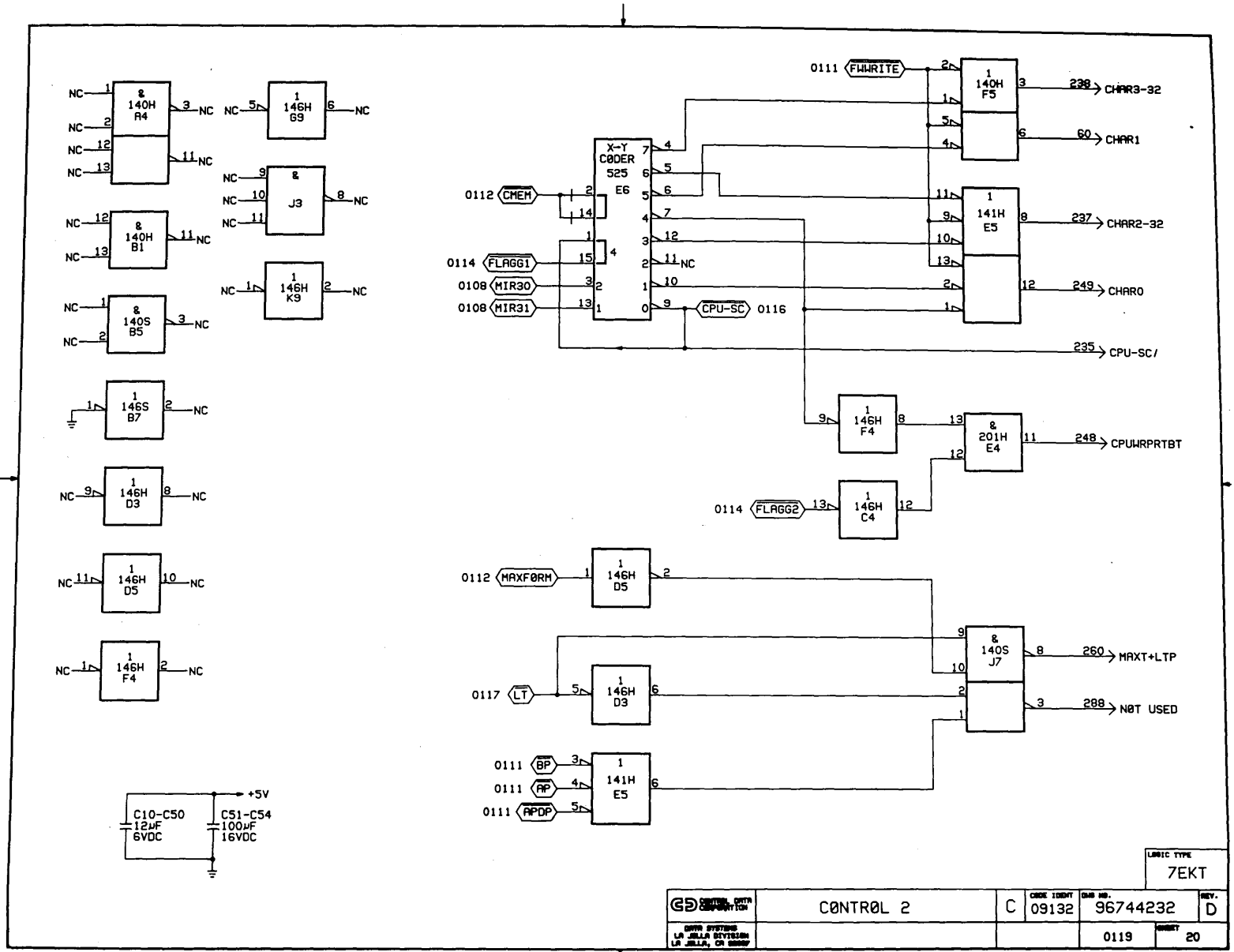


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 1 of 19)

(25,4)MM 1 INCH					DETACHED REVISIONS					315-0536976 6749600 LA				
FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS	FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
AEQUALB		207	6-C6		ALU11/		81	12-B7						
ALSBSL	204		17-C8		ALU12/		42	15-B7		BG0/	291		7-D6, 13-D6	
ALUM/	204		6-C5		ALU13/		8	15-B7		BG1/	288		7-D6, 13-B6	
					ALU14/		45	15-B7		BG2/	293		7-D3, 13-D3	
ALUS0/	240		18-C5		ALU15/		46	15-B7		BG3/	289		7-B3, 13-B3	
ALUS1/	239		18-B5		AMODES0	273		7-A6		BG4/	221		10-D6,	
ALUS2/	257		18-B5										16-D6	
ALUS3/	37		18-B5		AMODES1	73		7-A4		BG5/	211		10-B6,	
ALU00/		86	6-B7										16-B6	
ALU01/		82	6-B7		AMSBSR	297		8-D8		BG6/	210		10-D3,	
ALU02/		83	6-B7		AREG-00		295	8-D7					16-D3	
ALU03/		85	6-B7		AREG-01		266	8-D7		BG7/	209		10-B3,	
ALU04/		84	9-B7		AREG-02		263	8-D7					16-B3	
ALU05/		63	9-B7		AREG-08		26	14-D7						
ALU06/		58	9-B7		AREG-09		246	14-D7		BUS00	59		6-B5, 7-C5	
ALU07/		57	9-B7		AREG-10		244	14-D7		BUS01	60		6-C5, 7-A5	
ALU08/		92	12-B7		AREG-15		208	17-D7		BUS02	61		6-B2, 7-C2	
ALU09/		93	12-B7		BGGP0/	292		7-D6, 10-D6		BUS03	62		6-C2, 7-A3	
ALU10/		80	12-B7		BGGP1/	223		13-D6						

3. FILTER CAPACITOR REF. DESIGNATOR: C13 THRU C63.

2. +5 VOLT PINS: 1, 2, 201, 202

1. GROUND PINS: 51, 101, 102, 301, 302.

NOTES (UNLESS OTHERWISE SPECIFIED)

5. REFERENCE DESIGNATIONS NOT USED:
A10, B10, C5 THRU C8, C10, CD1 THRU CD4,
DE1 THRU DE4, DE10, E1, E5 THRU E11, F10, G1, G10, H1,
HJ2 THRU HJ4, HJ10, J1, JK1 THRU JK4, JK10, L10.

4. HIGHEST REFERENCE DESIGNATION:
A12, B11, C66, CD08, D4, DE12, E12, F12,
G12, GH1, H4, HJ12, J4, JK12, K4, L12, M12

CHANGES: (A) RELEASED TO PRODUCTION.

FOR REVISIONS SEE DETACHED REVISIONS (DR)

INTERPLANT USAGE (CODE)	REF	315-0536972
REQD	NEXT ASSEMBLY	
MATERIAL:		
COATING:		

REPLACES DWG 315-0533029

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UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±
.XXX ±

CLASS: MP17	UNIT: PROCESSOR
START: 12-1-75	NAME: SCHEMATIC-LOGIC, CPU
FINISH: 12-5-75	ARITHMETIC FILE 1
DFTS: JDR	SHEET 1 OF 18
CHKR: JEM/10/75	DWG SIZE: B
DESIGNER: A. WENE	SCALE: NONE
APPRO: JEM/10/75	CODE: -

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions

per CMC-STD 1.01.024.

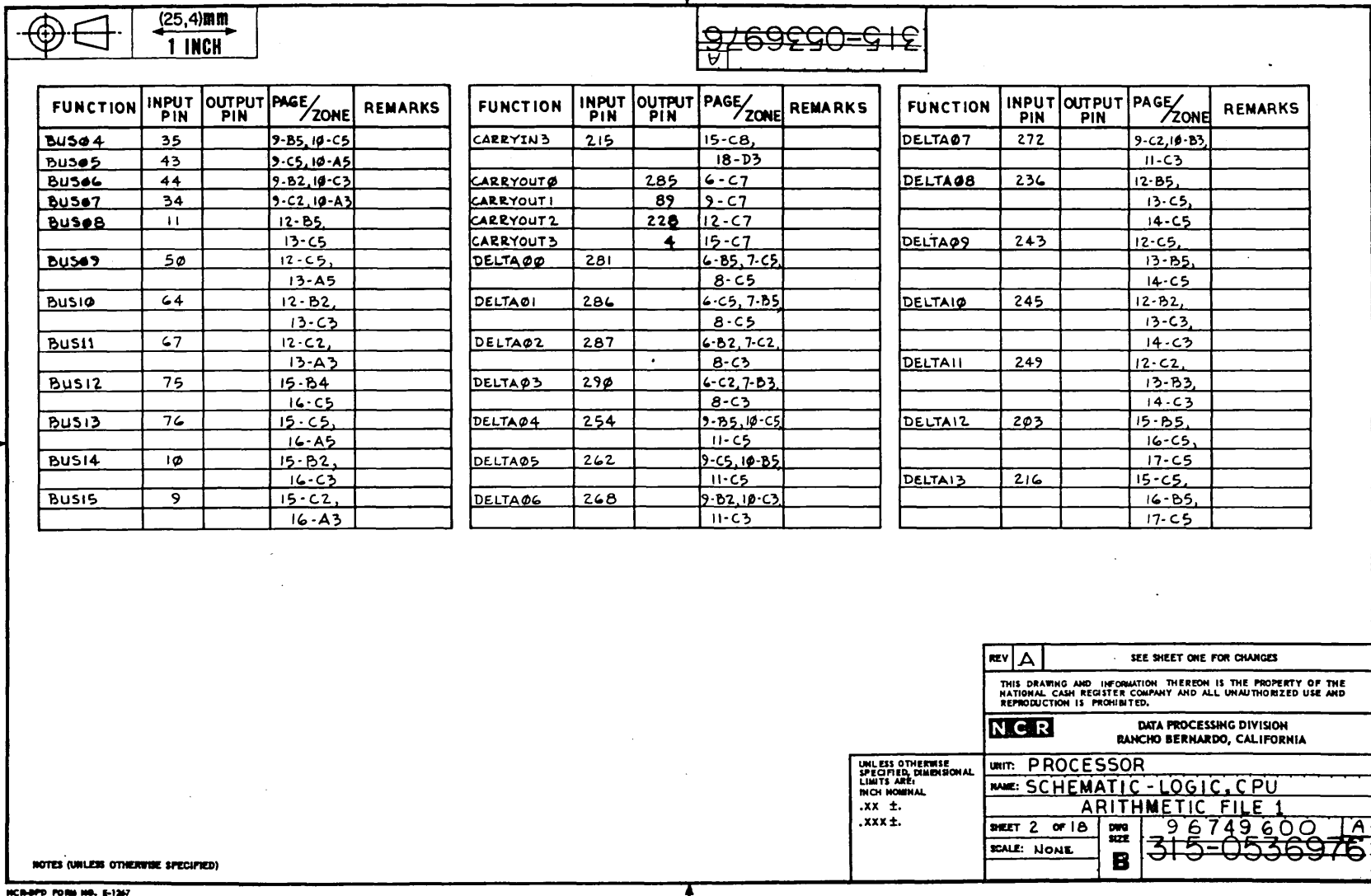
AAB030

MP17	-	35							
MP17	-	MP	A	35-11627					
CLASS	MODEL	PLANT	REV	RELEASE NO.	DFTS	DATE	CHECK	APPD	

DATA PROCESSING DIVISION
RANCHO BERNARDO, CALIFORNIA

6749600 LA
315-0536976

Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 2 of 19)





(25,4)mm
1 INCH

96749600LA
315-0536976

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE / ZONE	REMARKS
DELTA14	217		15-B2,	
			16-C3,	
			17-C3	
DELTA15	220		15-C2,	
			16-B3,	
			17-C3	
ENABLES2	30		18-B8	
FLAG103/	95		18-C3	(ADDER SPLIT)
GATEA/	274		8-D6	
GATEF/	205		8-D2	
GATEI/	32		6-A3	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE / ZONE	REMARKS
GATEP/	296		8-D4	
GATEQ/	70		7-A8	
GATEX/	278		7-A8	
GEN/		224	18-D2	
K0/	229		18-C3	
K1/	49		18-B3	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE / ZONE	REMARKS
K2/	276		18-B3	
K3/	253		18-B3	
K4/	242		18-B3	
K5/	48		18-B3	
K6/	277		18-B3	
K7/	17		18-A3	
MIR28-	212		18-A8	
MIR29-	6		18-A8	
MIR31-Q00/	14,94		6-A7,15-D7	
N0/	256		18-D8	
N1/	255		18-D8	
N2/	240		18-D8	
N3/	298		18-D8	
N4/	100		18-C8	
N5/	98		18-C8	
N6/	99		18-C8	
N7/	300		18-B8	
PROP0/		25	18-D2	
PROP01/		280	6-C7	
PROP11/		47	9-C7	

NOTES (UNLESS OTHERWISE SPECIFIED)

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±.
.XXX ±.

REV	A	SEE SHEET ONE FOR CHANGES
THIS DRAWING AND INFORMATION THEREON IS THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED.		
NCR		DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA
UNIT:	PROCESSOR	
NAME:	SCHEMATIC-LOGIC, CPU	
ARITHMETIC FILE 1		
SHEET 3 OF 18	DWG SIZE	96749600LA
SCALE: NONE	B	315-0536976

Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 4 of 19)

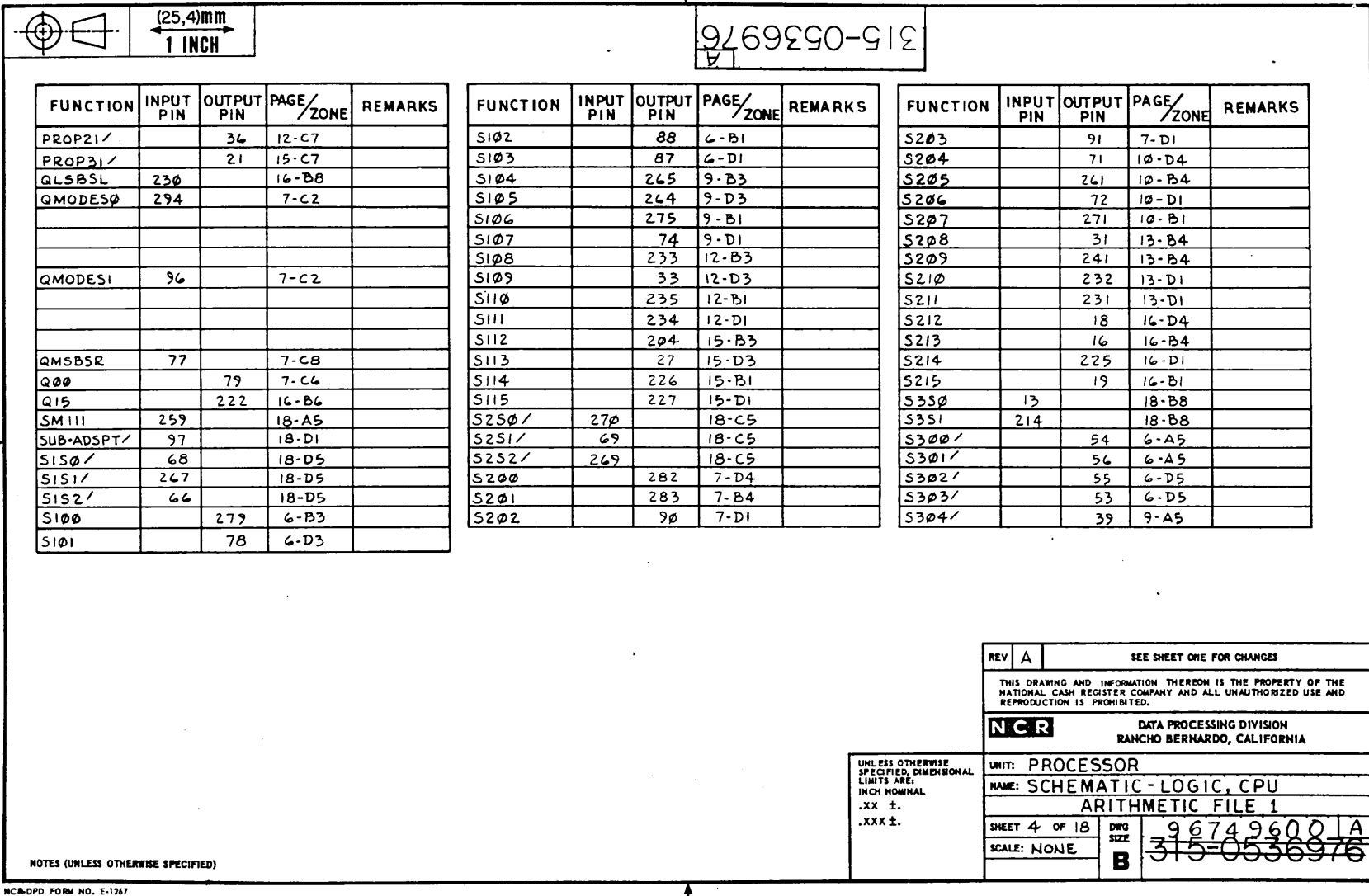


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 5 of 19)

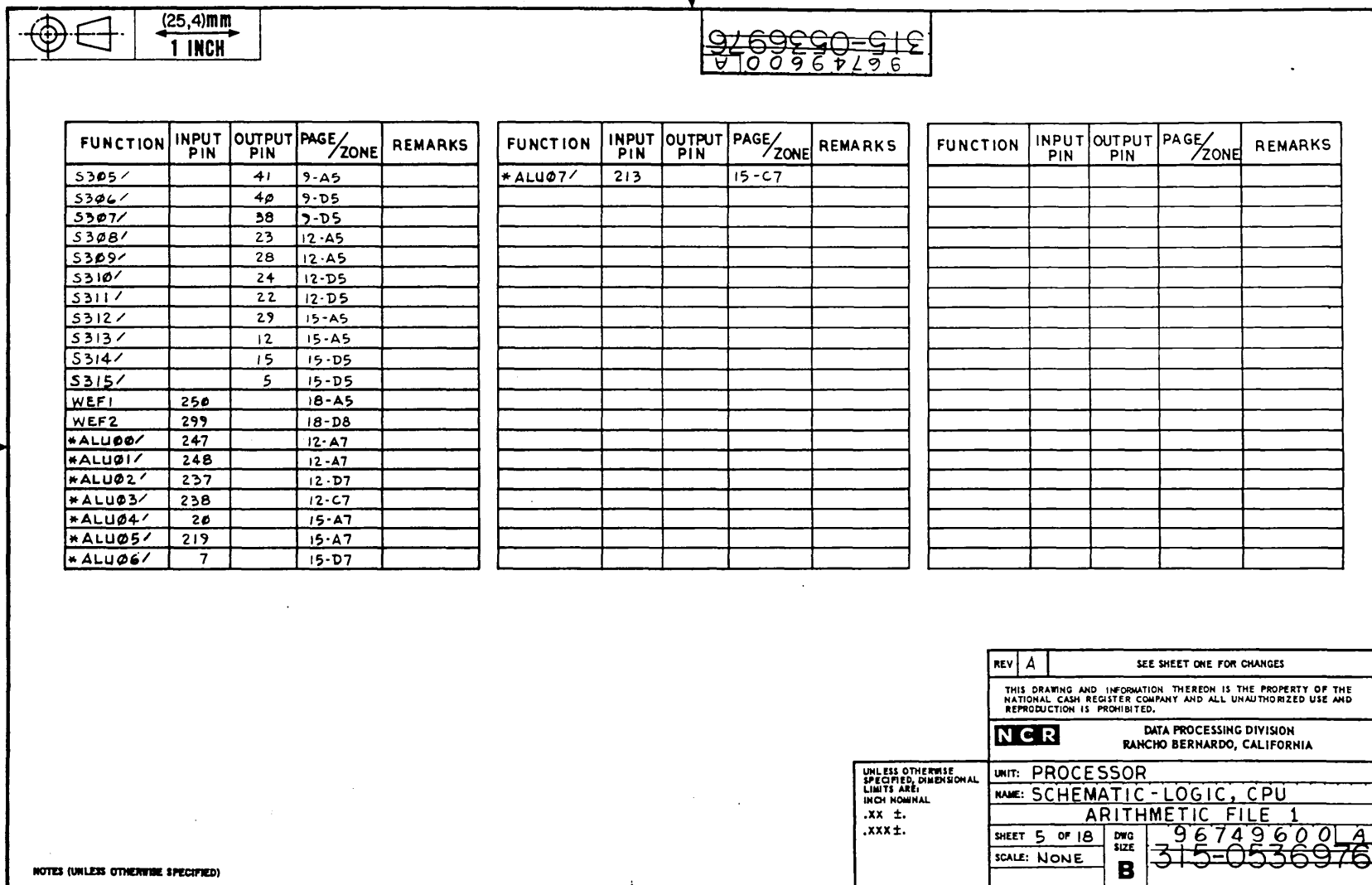
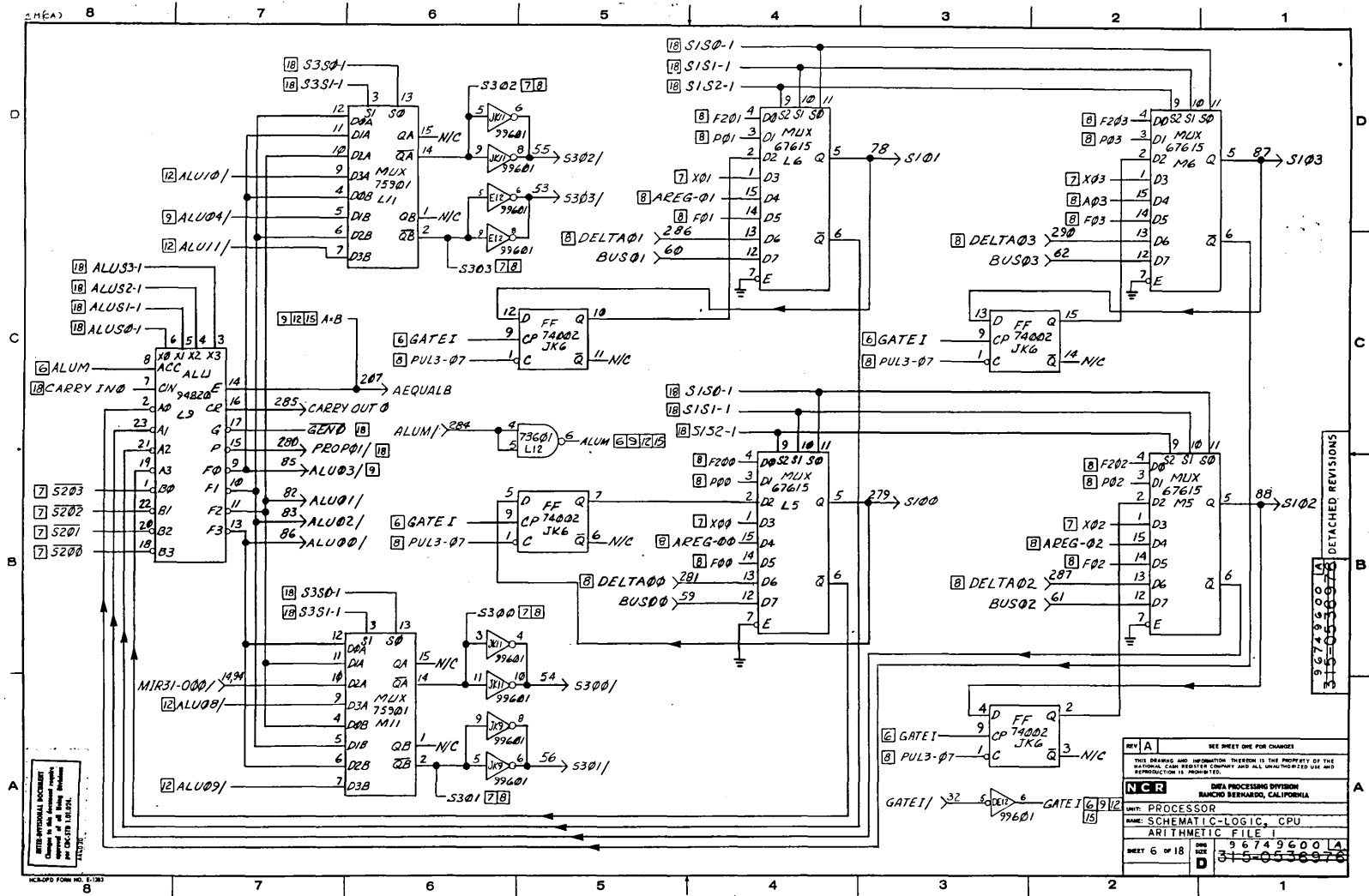


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 6 of 19)



PIN	SLOT T	BS-158-A SCHEMATIC	COMPARE SLOT T TO BS-158-A SCHEM	USAGE	New Design	PIN
Pins 93,94,207,213, 223, 258 and 275 connected together on backplane Slot T						
Pins 21,209, and 233 connected together on backplane Slot T						

PWR	Power
AI	Addres
CI	Control
CO	Control
DI	Data Li
DO	Data Li

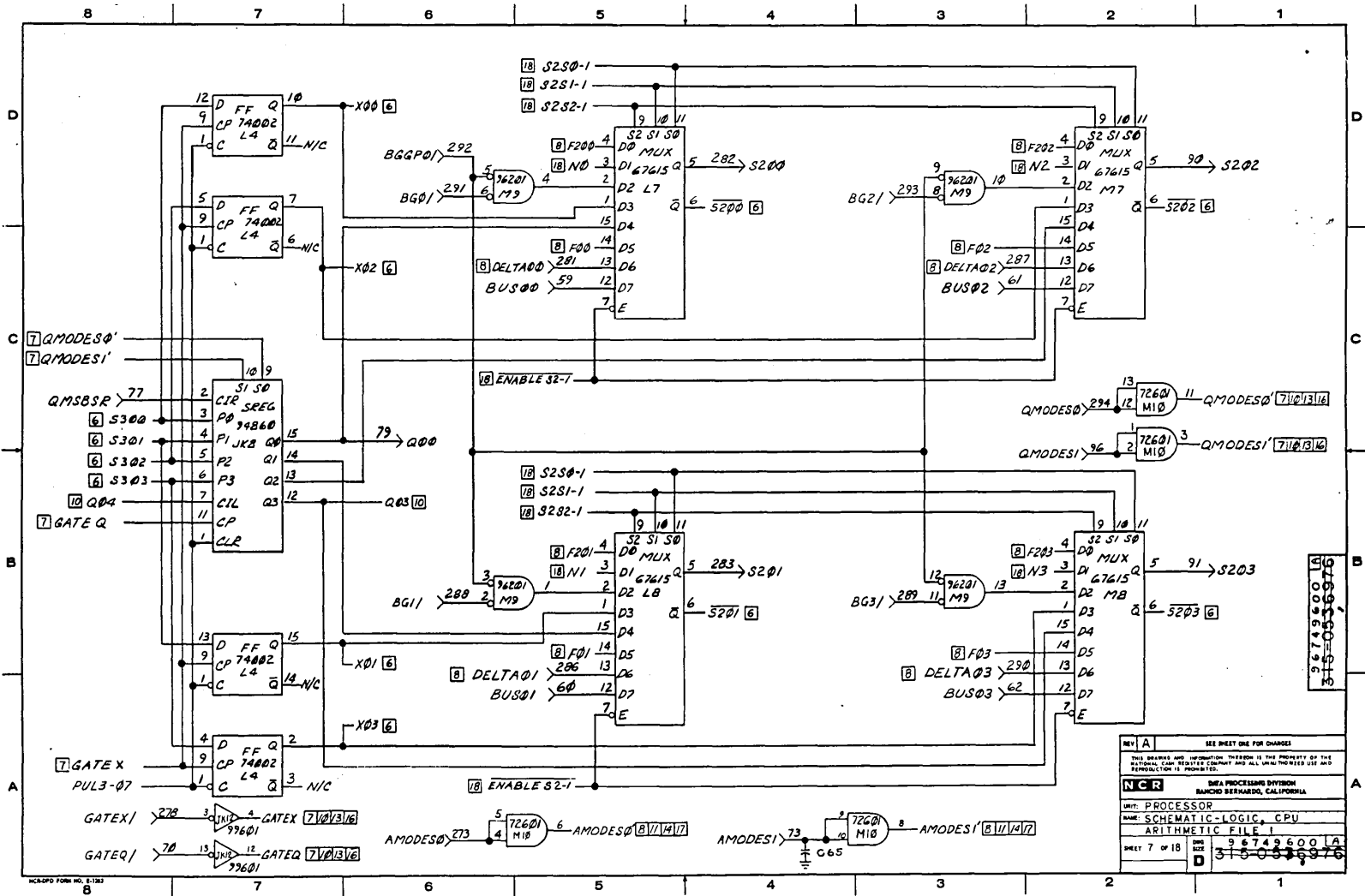
PIN	SLOT T	BS-158-A SCHEMATIC	COMPARE SLOT T TO BS-158-A SCHEM	USAGE	New Design	PIN
252	GND	GND	GND	PWR		252
253		BUS01*	NOT USED			253
254	GND	GND	GND	PWR		254
255	GND	GND	GND	PWR		255
256		N/C	NOT USED			256
257		N/C	NOT USED			257
258	CONENUM-1	DISABLEB	NOT USED	CI	CONENUM-1	258
259		MM03*	NOT USED			259
260		MM02*	NOT USED			260
261		N/C	NOT USED			261
262		GND	NOT USED			262
263	ENMML	ENMML	ENMML	CI	ENMML	263
264		BUS02*	NOT USED			264
265		MM19*	NOT USED			265
266		BUS03*	NOT USED			266
267	ENMMU	ENMMU	ENMMU	CI	ENMMU	267
268	XTPAGE0/	XTPAGE0/	XTPAGE0/	CI	XTPAGE0/	268
269	DISABLEX/	DISABLEA	NOT USED	CO	DISABLEX/	269
270		MM12*	NOT USED			270
271		MM28*	NOT USED			271
272		BUS13*	NOT USED			272
273	S215*	S215*	S215*	DI	S215*	273
274		MM11*	NOT USED			274
275	CONENUM-1	N/C	NOT USED			275
276	MA4/	MA4/	MA4/	AI	MA4/	276
277	S209*	S209*	S209*	DI	S209*	277
278	MA6/	MA6/	MA6/	AI	MA6/	278
279	S208*	S208*	S208*	DI	S208*	279
280	S209	S209	S209	DI	S209	280
281	S208	S208	S208	DI	S208	281
282	MA7/	MA7/	MA7/	AI	MA7/	282
283		N/C	NOT USED			283
284		GND	NOT USED			284
285		MMU-PAR	NOT USED			285
286		MML-PAR	NOT USED			286
287	GND	GND	GND	PWR		287
288	GND	GND	GND	PWR		288
289		BUS10*	NOT USED			289
290	S214*	S214*	S214*	DI	S214*	290
291	S215	S215	S215	DI	S215	291
292	MA5/	MA5/	MA5/	AI	MA5/	292
293	MA2/	MA2/	MA2/	AI	MA2/	293
294		GND	NOT USED	PWR		294
295		N/C	NOT USED			295
296		N/C	NOT USED			296
297		N/C	NOT USED			297
298		8KENAB	NOT USED			298
299		2KENAB	NOT USED			299
300		N/C	NOT USED			300
301	GND	GND	GND	PWR		301
302	GND	GND	GND	PWR		302

PIN	SLOT T	BS-158-A SCHEMATIC	COMPARE SLOT T TO BS-158-A SCHEM	USAGE	New Design	PIN
201	+5V	+5VDC	NOT USED	PWR		201
202	+5V	+5VDC	NOT USED	PWR		202
203	GND	GND	GND	PWR		203
204		ENMM/	NOT USED	CI	ENMM/	204
205	MA0/	MA0/	MA0/	AI	MA0/	205
206		MM22*	NOT USED			206
207	CONENUM-1	T1	NOT USED			207
208	XTPAGE0/	CONENUM-4	XTPAGE0/	CO		208
209	CONENUM-2	CONENUM-2	CONENUM-2	CO		209
210		N/C	NOT USED			210
211		N/C	NOT USED			211
212		N/C	NOT USED			212
213	CONENUM-1	CONENUM-1	CONENUM-1	CO		213
214	GND	GND	GND	PWR		214
215	MA3/	MA3/	MA3/	AI	MA3/	215
216	S204*	S204*	S204*	DI	S204*	216
217	SELGETMAK/	SELGETMAK/	SELGETMAK/	CI	SELGETMAK/	217
218		MM30*	NOT USED			218
219		BUS15*	NOT USED			219
220	S202*	S202*	S202*	DI	S202*	220
221	S201*	S201*	S201*	DI	S201*	221
222	S200*	S200*	S200*	DI	S200*	222
223	CONENUM-1	N/C	NOT USED			223
224	GND	GND	GND	PWR		224
225	S200	S200	S200	DI	S200	225
226	S201	S201	S201	DI	S201	226
227	S202	S202	S202	DI	S202	227
228	S203*	S203*	S203*	DI	S203*	228
229		BUS09*	NOT USED			229
230		MM09*	NOT USED			230
231		MM08*	NOT USED			231
232		MM24*	NOT USED			232
233	CONENUM-2	ENMMLB/	NOT USED			233
234	PG3/	PG3/	PG3/	AI	PG3/	234
235	PG2/	PG2/	PG2/	AI	PG2/	235
236	PG1/	PG1/	PG1/	AI	PG1/	236
237		N/C	NOT USED			237
238		BUS04*	NOT USED			238
239		MM05*	NOT USED			239
240	GND	GND	GND	PWR		240
241		BUS06*	NOT USED			241
242		MM23*	NOT USED			242
243		MM07*	NOT USED			243
244		S2PAR	NOT USED			244
245		S2PAR*	NOT USED			245
246		BUS07*	NOT USED			246
247		MM01*	NOT USED			247
248		MM00*	NOT USED			248
249		BUS00*	NOT USED			249
250		MM16*	NOT USED			250
251	GND	GND	GND	PWR		251

PIN	SLOT T	BS-158-A SCHEMATIC	COMPARE SLOT T TO BS-158-A SCHEM	USAGE	New Design	PIN
52	GND	GND	GND	PWR		52
53		MM18*	NOT USED			53
54		MM17*	NOT USED			54
55	MM08	MM08	MM08	DO	MM08	55
56	MM09	MM09	MM09	DO	MM09	56
57	MM10	MM10	MM10	DO	MM10	57
58	MM11	MM11	MM11	DO	MM11	58
59	BUS00	BUS00	NOT USED			59
60	BUS01	BUS01	NOT USED			60
61	BUS02	BUS02	NOT USED			61
62	BUS03	BUS03	NOT USED			62
63	MM12	MM12	MM12	DO	MM12	63
64	BUS10	BUS10	NOT USED			64
65	MM13	MM13	MM13	DO	MM13	65
66	MM14	MM14	MM14	DO	MM14	66
67	BUS11	BUS11	NOT USED			67
68		MM27*	NOT USED			68
69		BUS11*	NOT USED			69
70	MM15	MM15	MM15	DO	MM15	70
71		MM29*	NOT USED			71
72	MMWL16/	MMWL16/	MMWL16/	CI	MMWL16/	72
73		MM10*	NOT USED			73
74		MM26*	NOT USED			74
75	BUS12	BUS12	NOT USED			75
76	BUS13	BUS13	NOT USED			76
77	MM24	MM24	MM24	DO	MM24	77
78	MM25	MM25	MM25	DO	MM25	78
79	MM26	MM26	MM26	DO	MM26	79
80	MM27	MM27	MM27	DO	MM27	80
81	MM28	MM28	MM28	DO	MM28	81
82	MM29	MM29	MM29	DO	MM29	82
83	MM30	MM30	MM30	DO	MM30	83
84	MM31	MM31	MM31	DO	MM31	84
85		BUS12*	NOT USED			85
86		MM13*	NOT USED			86
87	S210*	S210*	S210*	DI	S210*	87
88	S210	S210	S210	DI	S210	88
89	S211*	S211*	S211*	DI	S211*	89
90	S211	S211	S211	DI	S211	90
91	S212*	S212*	S212*	DI	S212*	91
92	S212	S212	S212	DI	S212	92
93	CONENUM-1	N/C	NOT USED			93
94	CONENUM-1	N/C	NOT USED			94
95	S213*	S213*	S213*	DI	S213*	95
96	S213	S213	S213	DI	S213	96
97	S214	S214	S214	DI	S214	97
98	MMWU16/	MMWU16/	MMWU16/	CI	MMWU16/	98
99		DISABLE/	NOT USED	CI	DISABLE/	99
100		N/C	NOT USED			100
101	GND	GND	GND	PWR		101
102	GND	GND	GND	PWR		102

PIN	SLOT T	BS-158-A SCHEMATIC	COMPARE SLOT T TO BS-158-A SCHEM	USAGE	New Design	PIN
1	+5VDC	+5VDC	+5VDC	PWR		1
2	+5VDC	+5VDC	+5VDC	PWR		2
3	GND	GND	GND	PWR		3
4	S207*	S207*	S207*	DI	S207*	4
5	MA1/	MA1/	MA1/	AI	MA1/	5
6	S206*	S206*	S206*	DI	S206*	6
7	S206	S206	S206	DI	S206	7
8	DISABLEX/	CONENUM-3	DISABLEX/	CO		8
9	BUS15	BUS15	NOT USED			9
10	BUS14	BUS14	NOT USED			10
11	BUS08	BUS08	NOT USED			11
12	S203	S203	S203	DI	S203	12
13	S204	S204	S204	DI	S204	13
14	S205*	S205*	S205*	DI	S205*	14
15	S205	S205	S205	DI	S205	15
16	S207	S207	S207	DI	S207	16
17		MM14*	NOT USED			17
18		BUS14*	NOT USED			18
19		MM15*	NOT USED			19
20		MM31*	NOT USED			20
21	CONENUM-2	ENMMUB/	NOT USED			21
22	MM07	MM07	MM07	DO	MM07	22
23	MM06	MM06	MM06	DO	MM06	23
24	MM05	MM05	MM05	DO	MM05	24
25	MM04	MM04	MM04	DO	MM04	25
26	MM03	MM03	MM03	DO	MM03	26
27	MM02	MM02	MM02	DO	MM02	27
28	MM00	MM00	MM00	DO	MM00	28
29		BUS08*	NOT USED			29
30		MM25*	NOT USED			30
31	MM01	MM01	MM01	DO	MM01	31
32		BUS05*	NOT USED			32
33		MM21*	NOT USED			33
34	BUS07	BUS07	NOT USED			34
35	BUS04	BUS04	NOT USED			35
36	PGO/	PGO/	NOT USED		PGO/	36
37		MM20*	NOT USED			37
38		MM04*	NOT USED			38
39		MM06*	NOT USED			39
40	MM16	MM16	MM16	DO	MM16	40
41	MM17	MM17	MM17	DO	MM17	41
42	MM23	MM23	MM23	DO	MM23	42
43	BUS05	BUS05	NOT USED			43
44	BUS06	BUS06	NOT USED			44
45	MM22	MM22	MM22	DO	MM22	45
46	MM21	MM21	MM21	DO	MM21	46
47	MM20	MM20	MM20	DO	MM20	47
48	MM19	MM19	MM19	DO	MM19	48
49	MM18	MM18	MM18	DO	MM18	49
50	BUS09	BUS09	NOT USED			50
51	GND	GND	GND	PWR		51

Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 7 of 19)



The schematic diagram illustrates the internal logic of a processor unit, organized into three main sections labeled A, B, and C. Each section contains a D RAM (94815) and a 74002 M3 flip-flop. The diagram is heavily interconnected with various control signals and data lines.

Section A: Includes inputs for AMODES0, AMODES1, AMSBSR, and A04. It features a 74002 M3 flip-flop and a 74002 M2 flip-flop. Control signals include GATEA, GATEB, and GATEC. Data lines are labeled with addresses like 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 81

Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 10 of 19)

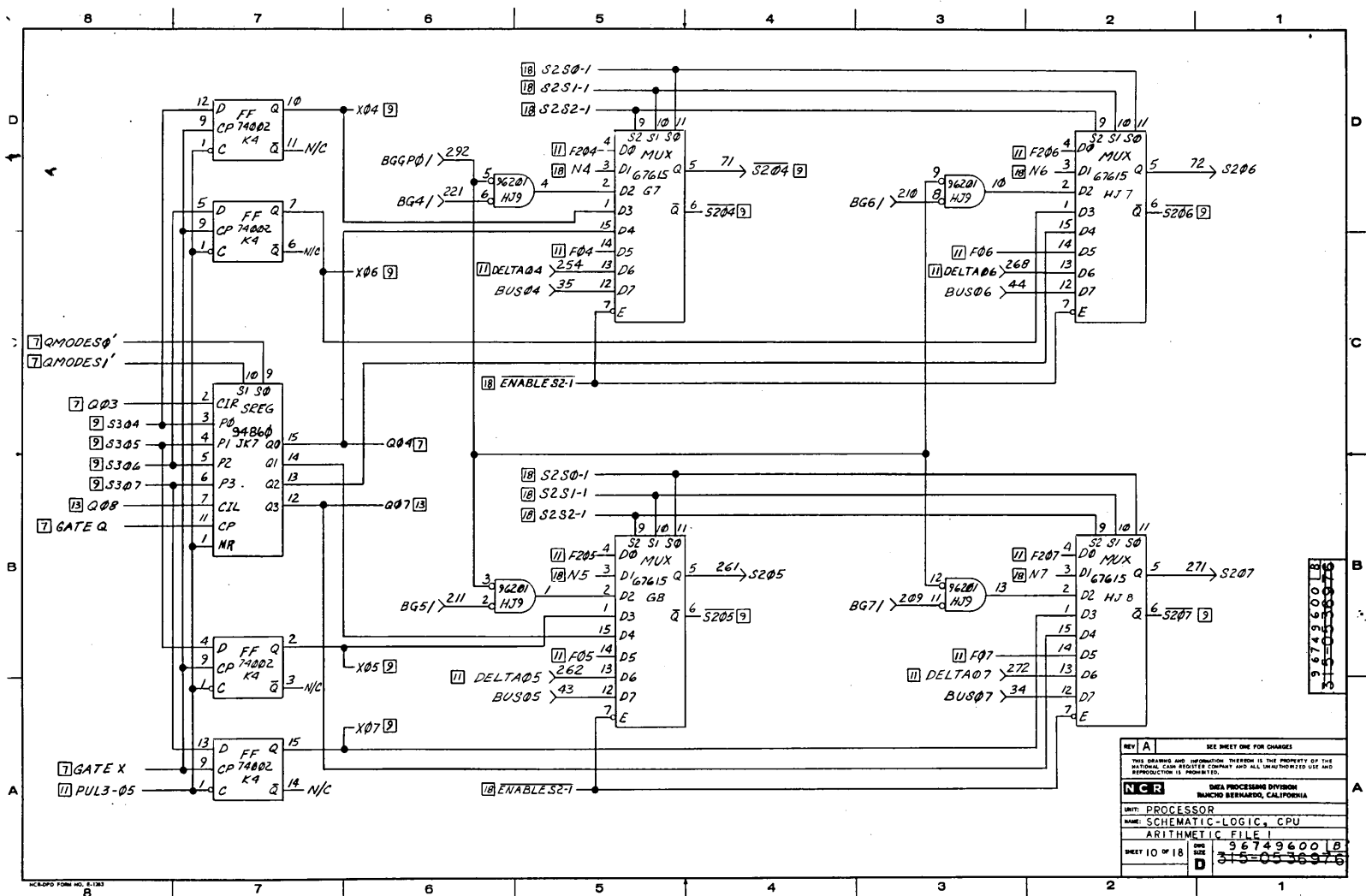


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 11 of 19)

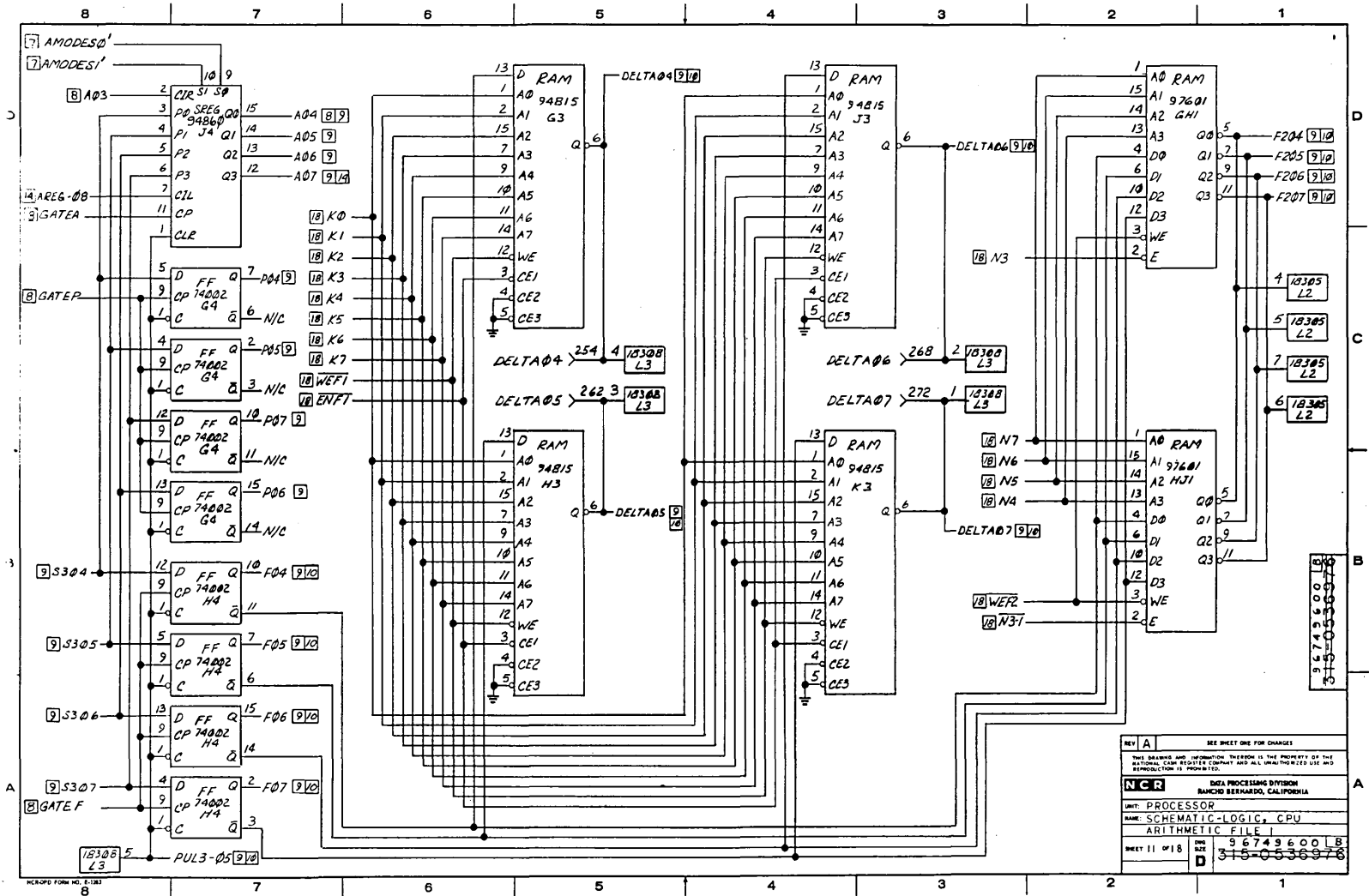


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 12 of 19)

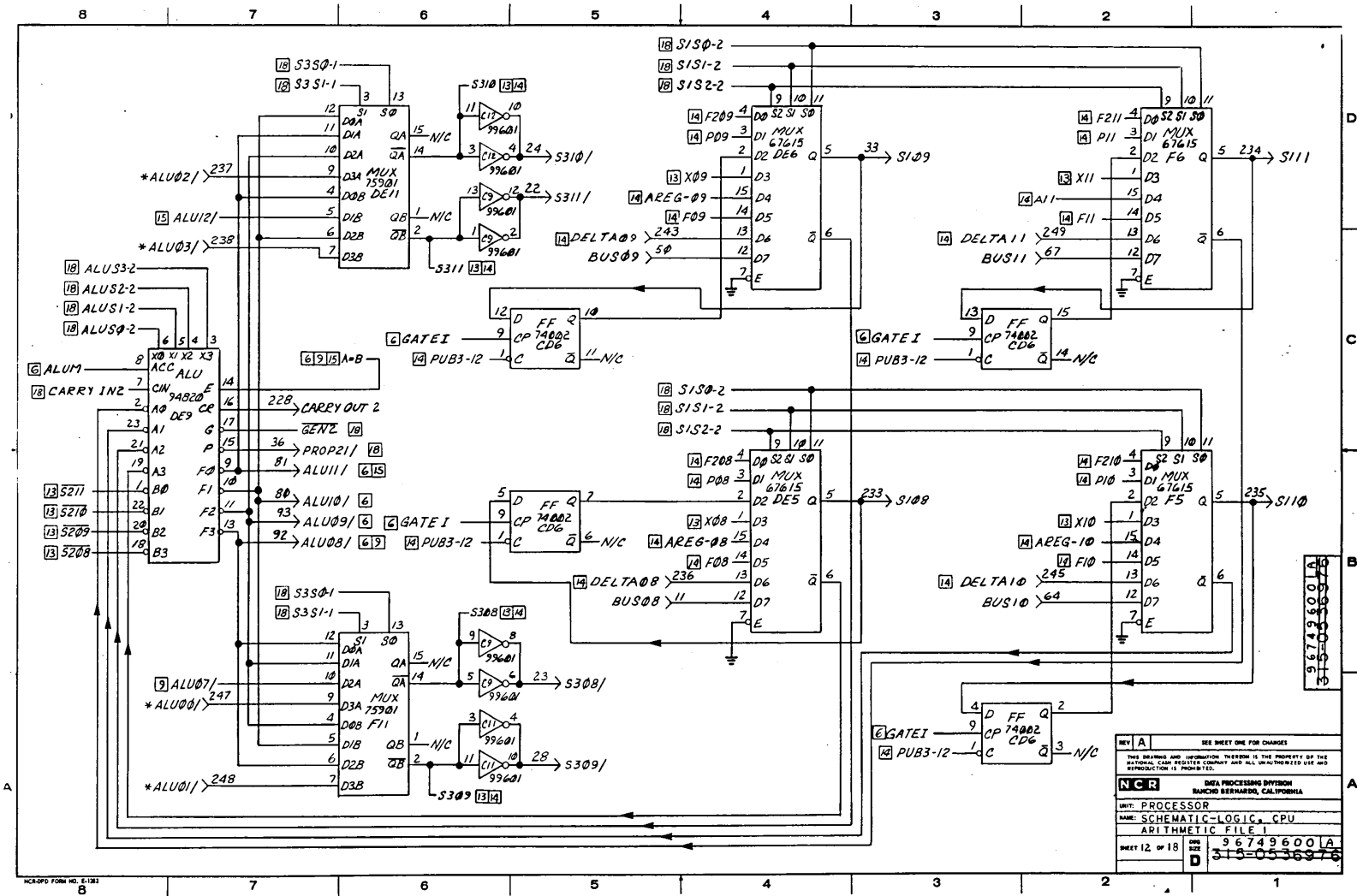
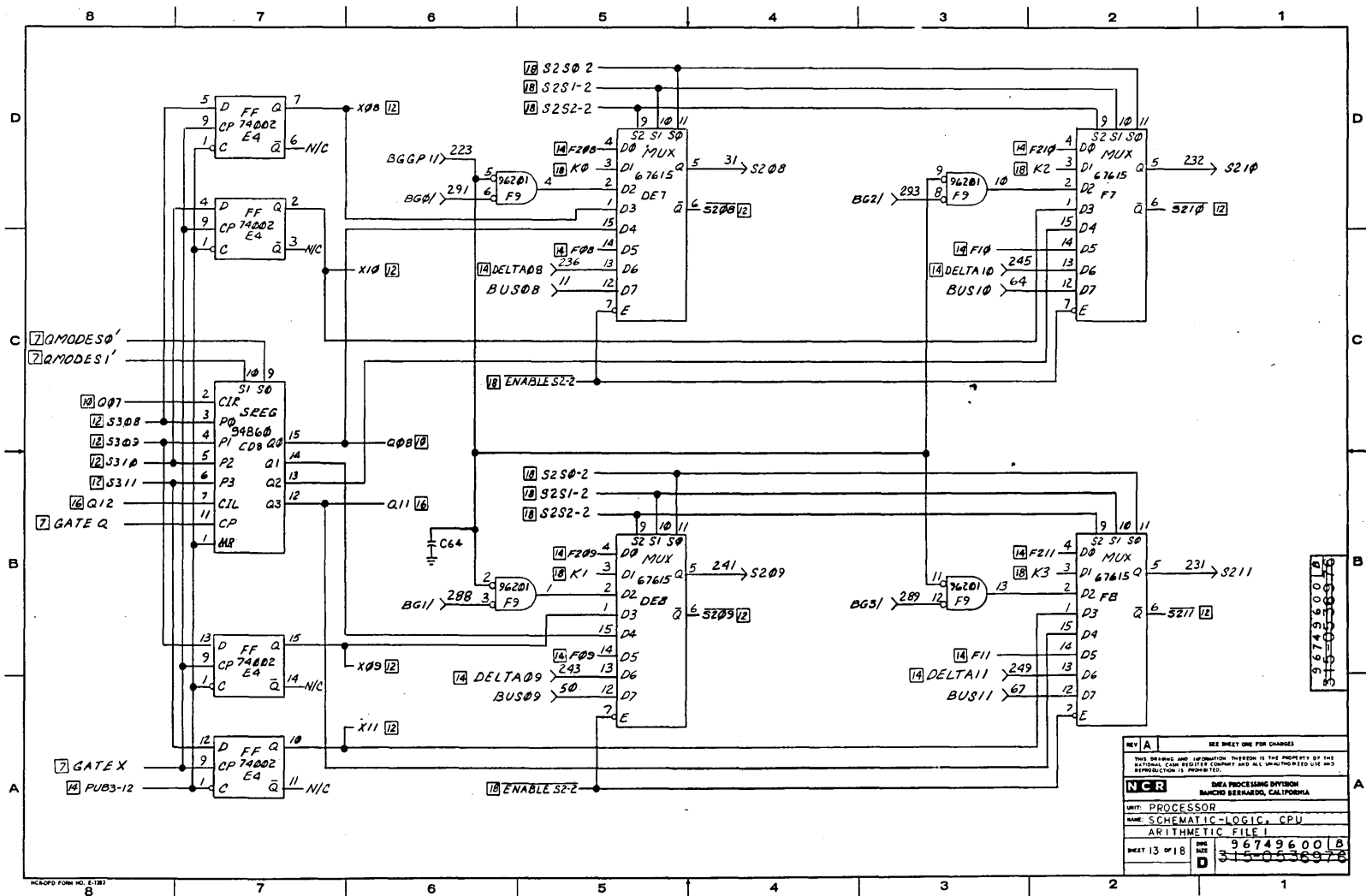


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 13 of 19)



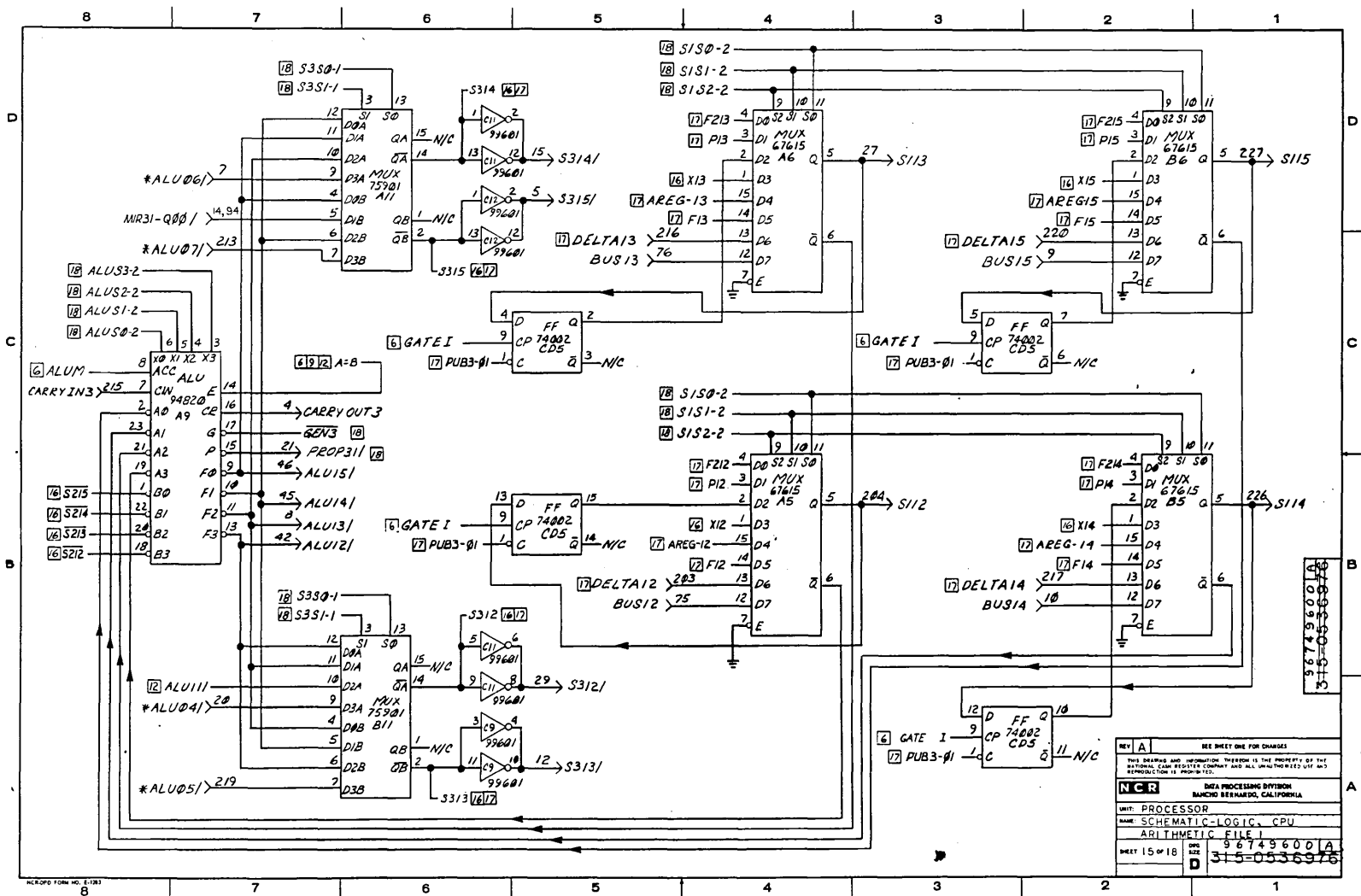


Figure 1-7. Arithmetic Logic Unit (ALU) (PWA 88910201) Logic Diagram (Sheet 16 of 19)

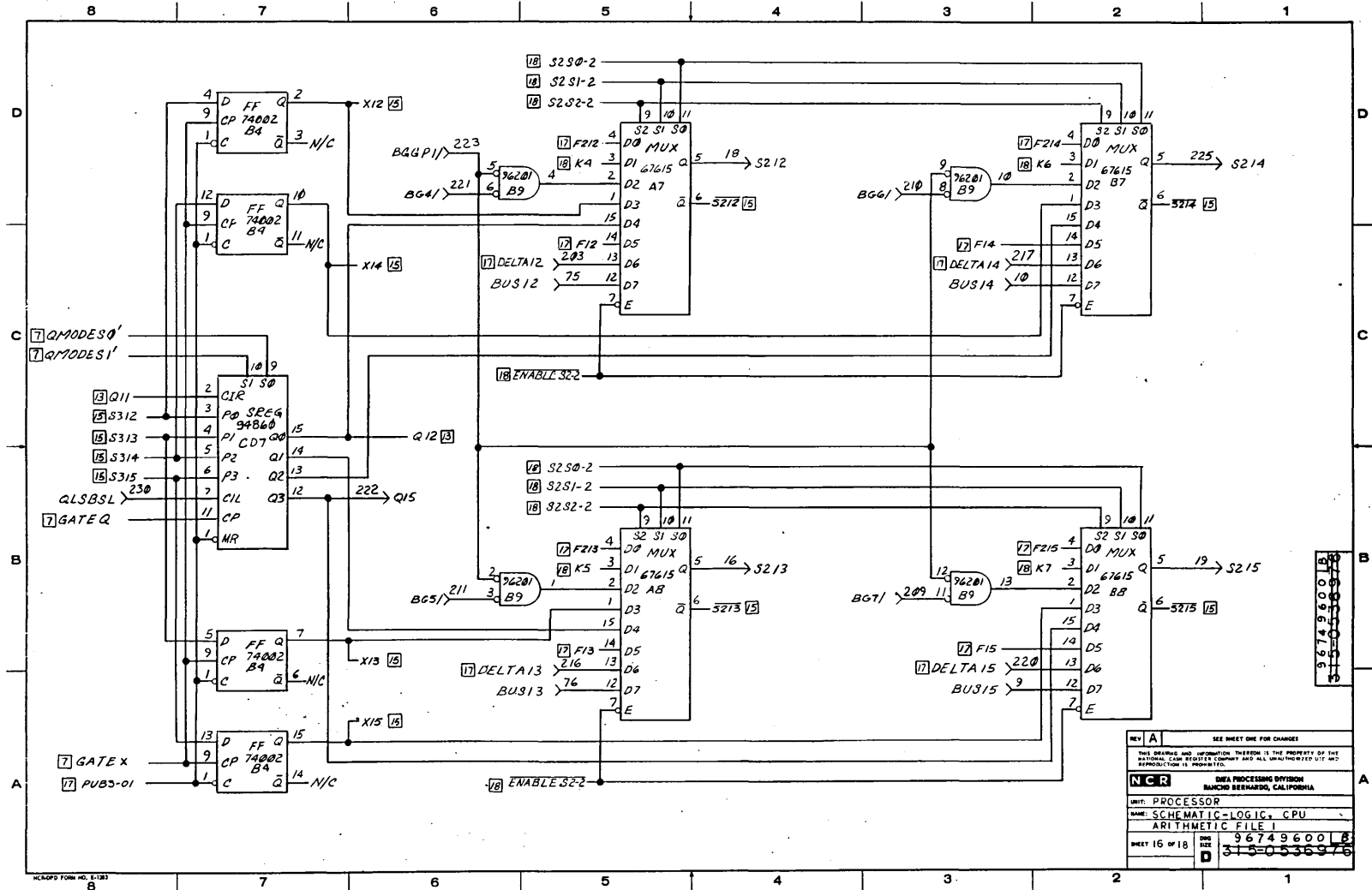


Figure 1-7. Arithmetic Logic Unit (ALU) (FMA 88910201) Logic Diagram (Sheet 17 of 19)

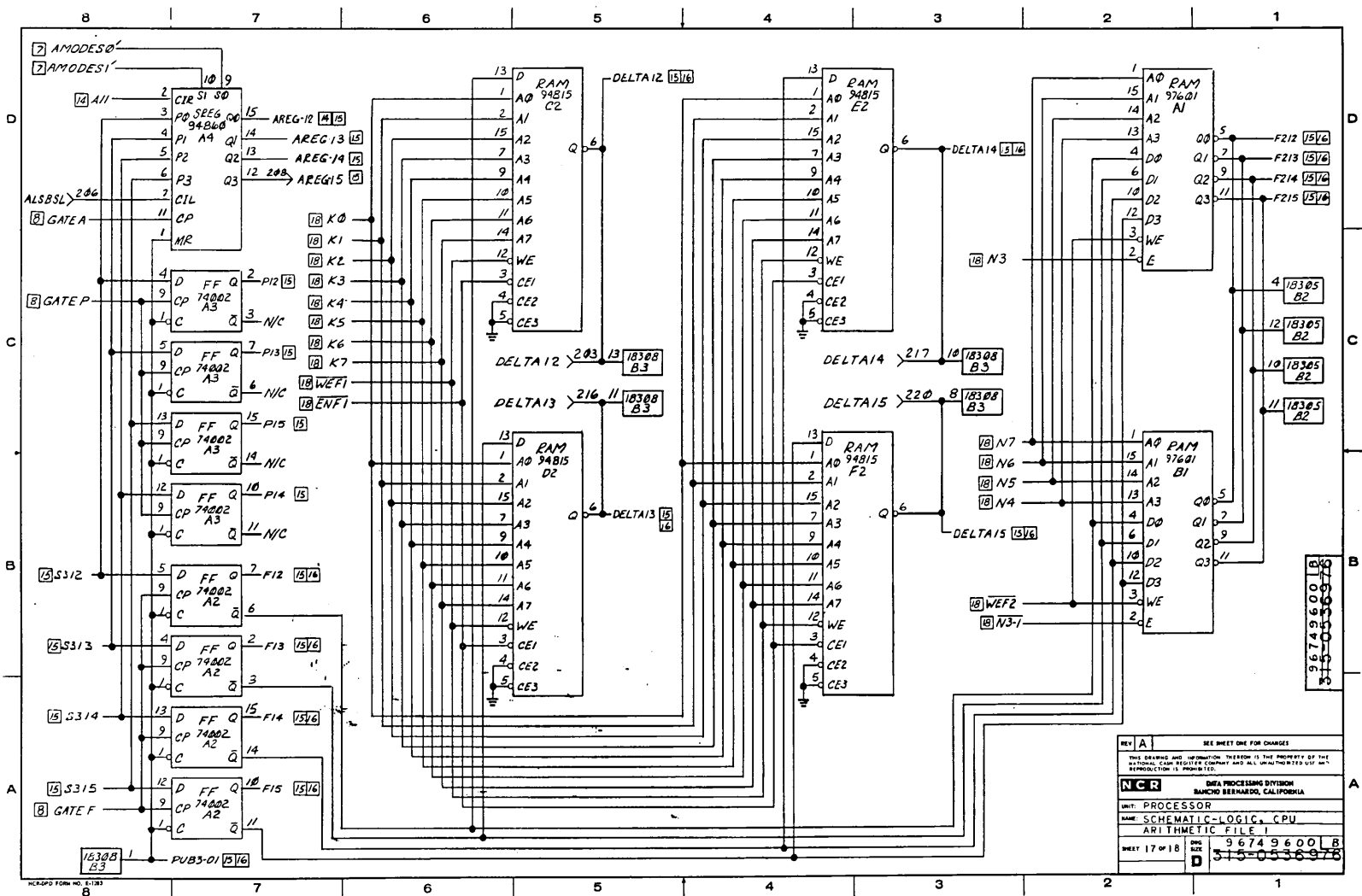
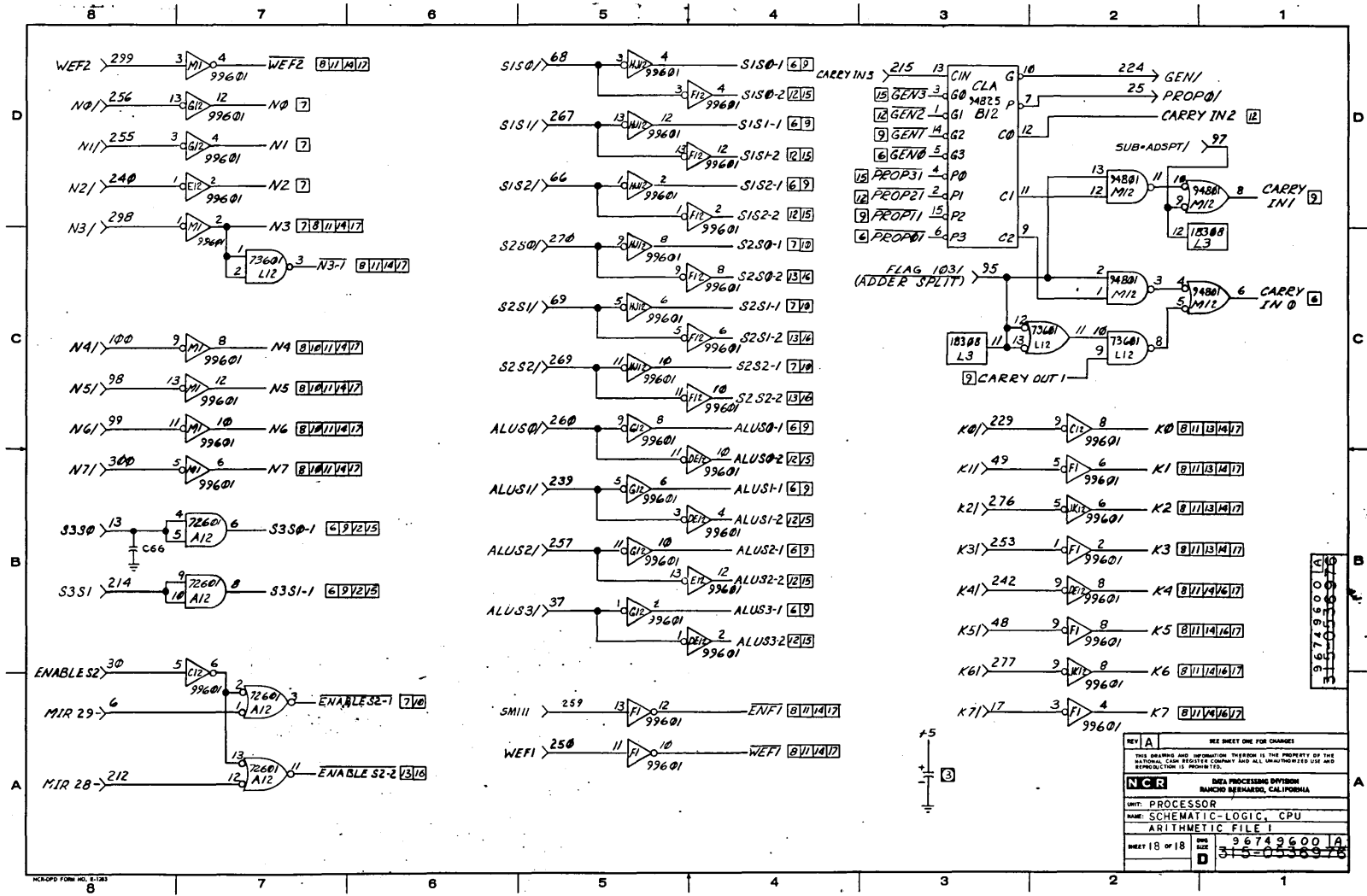


Figure 1-7. Arithmetic Logic Unit (ALU) (PMA 88910201) Logic Diagram (Sheet 18 of 19)



2A5A

AA3180 REV. 8/71

Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 1 of 18)

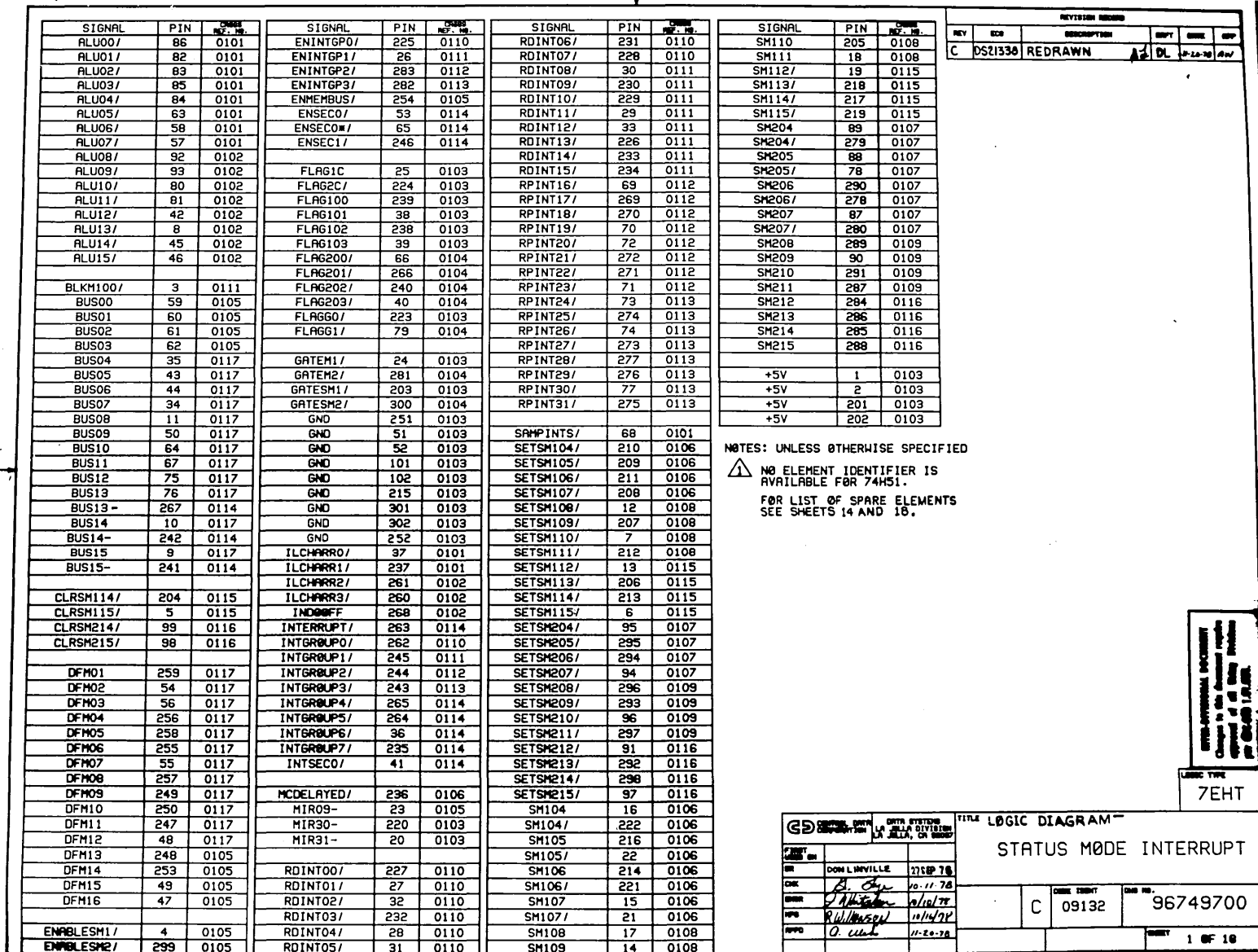
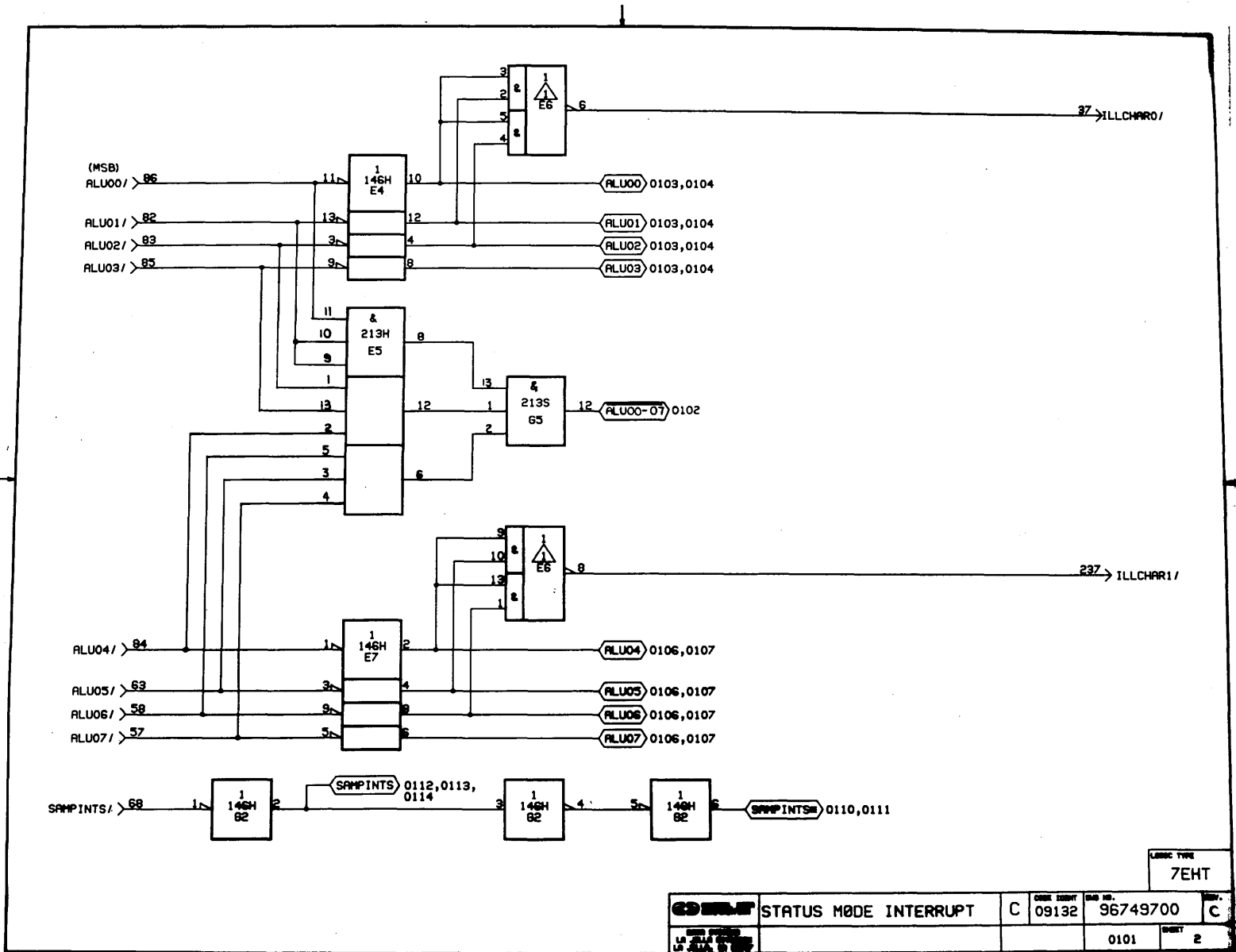


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 2 of 18)



CONV
U.S. PAT. & TM. OFF.
U.S. PAT. & TM. OFF.

STATUS MODE INTERRUPT

C

09132

96749700

C

0101

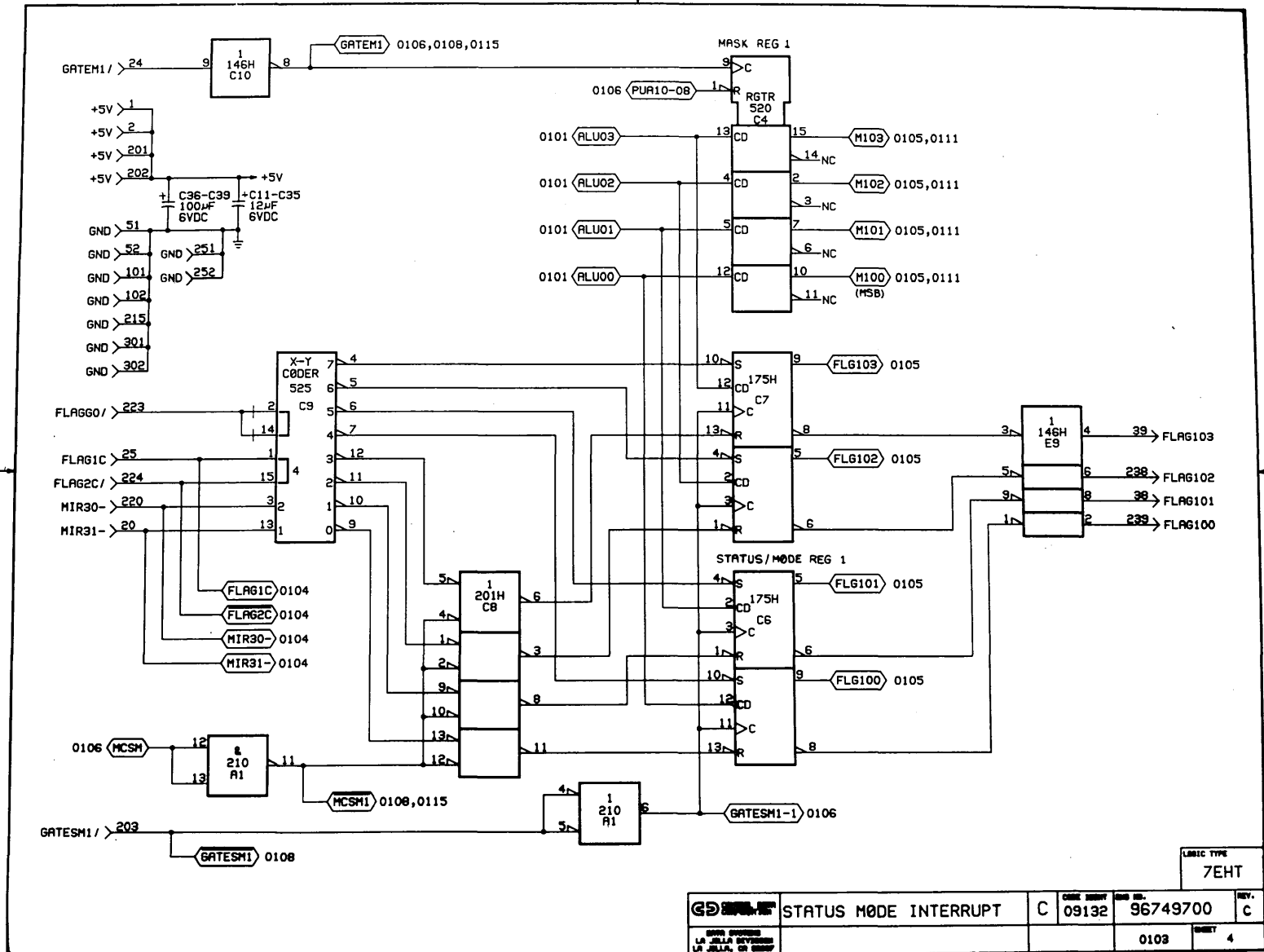
2

CLASS TYPE
7EHT

The logic diagram illustrates the internal structure of the 74180 ALU. It features several 146H (G3) and 213S (G4) chips. ALU08 through ALU11 are connected to 146H chips, while ALU12 through ALU15 are connected to a stack of 146H chips. 213S chips are used for internal logic and control, including a 213S G5 chip connected to the INDOFF signal. The diagram shows the routing of data and control signals between these components and the external ALU inputs and outputs.

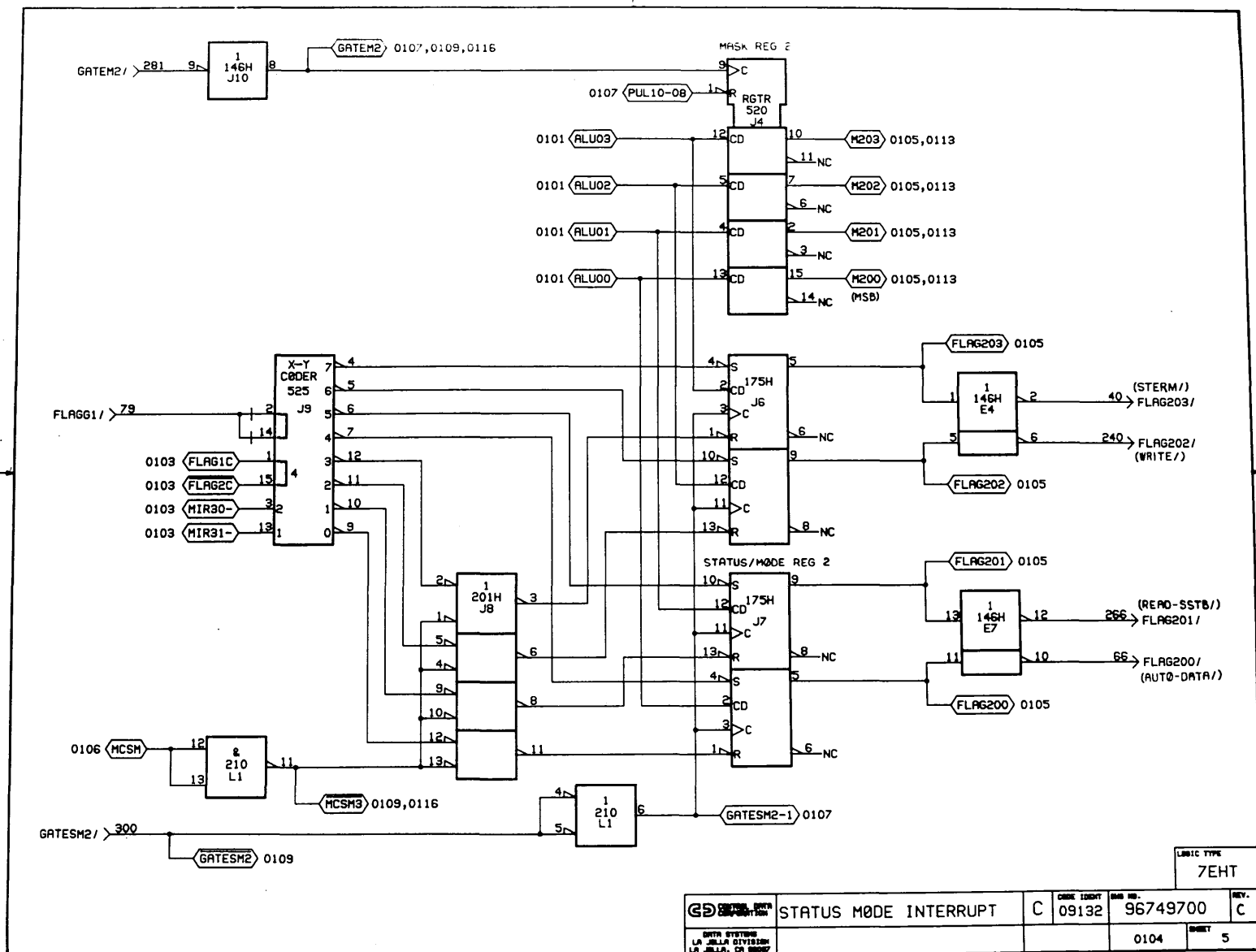
ALU	Inputs	Outputs
ALU08	92, 13	0108, 0109
ALU09	93, 13	0108, 0109
ALU10	80, 1	0108, 0109
ALU11	81, 11	0108, 0109
ALU12	42, 3	0115, 0116
ALU13	8, 5	0115, 0116
ALU14	45, 9	0115, 0116
ALU15 (LSB)	46, 11	0115, 0116

Figure 1-8. Status Mode Interrupt (SMI) (PMA 88909100) Logic Diagram (Sheet 4 of 18)



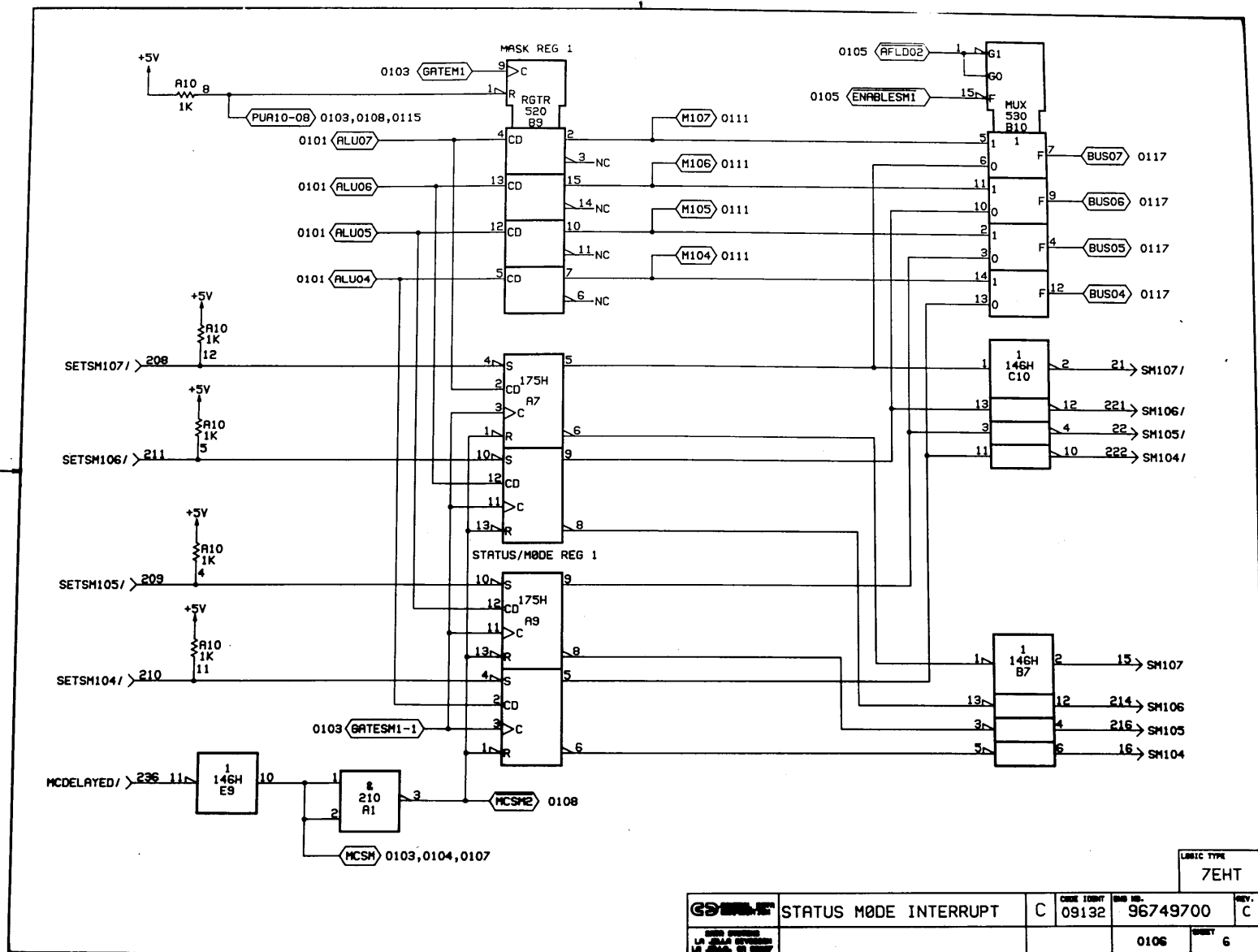
	STATUS MODE INTERRUPT	C	CIRCUIT NO. 09132	PMA NO. 96749700	REV. C
DATE SPECIFIED LA JOLLA, CALIFORNIA LA JOLLA, CA 92037			0103	SHEET	4

Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 5 of 18)

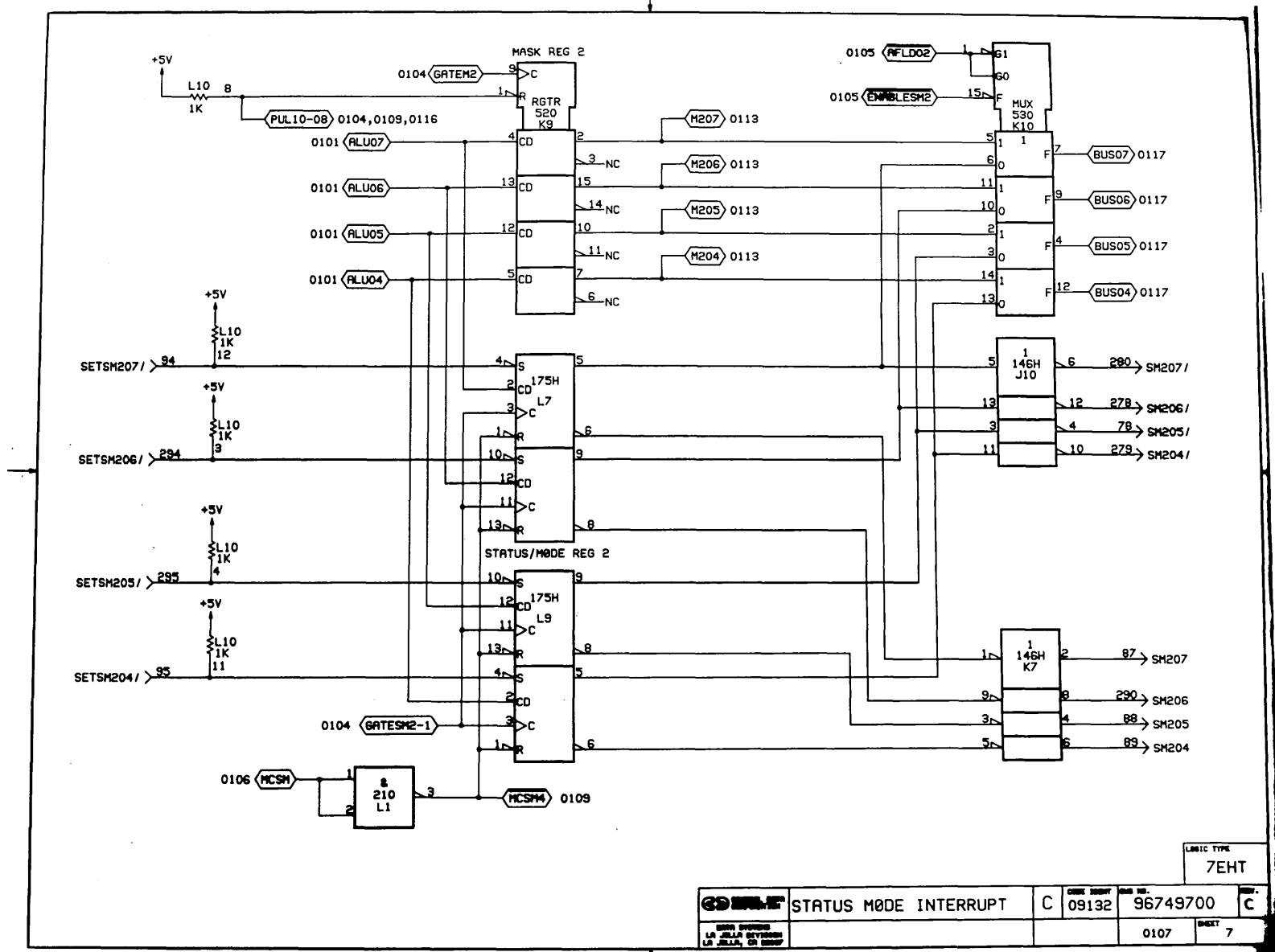


GDS SYSTEMS		STATUS MODE INTERRUPT		C	09132	96749700	REV. C
DATA SYSTEMS		LA JOLLA DIVISION		0104		5	
LA JOLLA, CA 92037							

Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 6 of 18)



of 18)



1-124

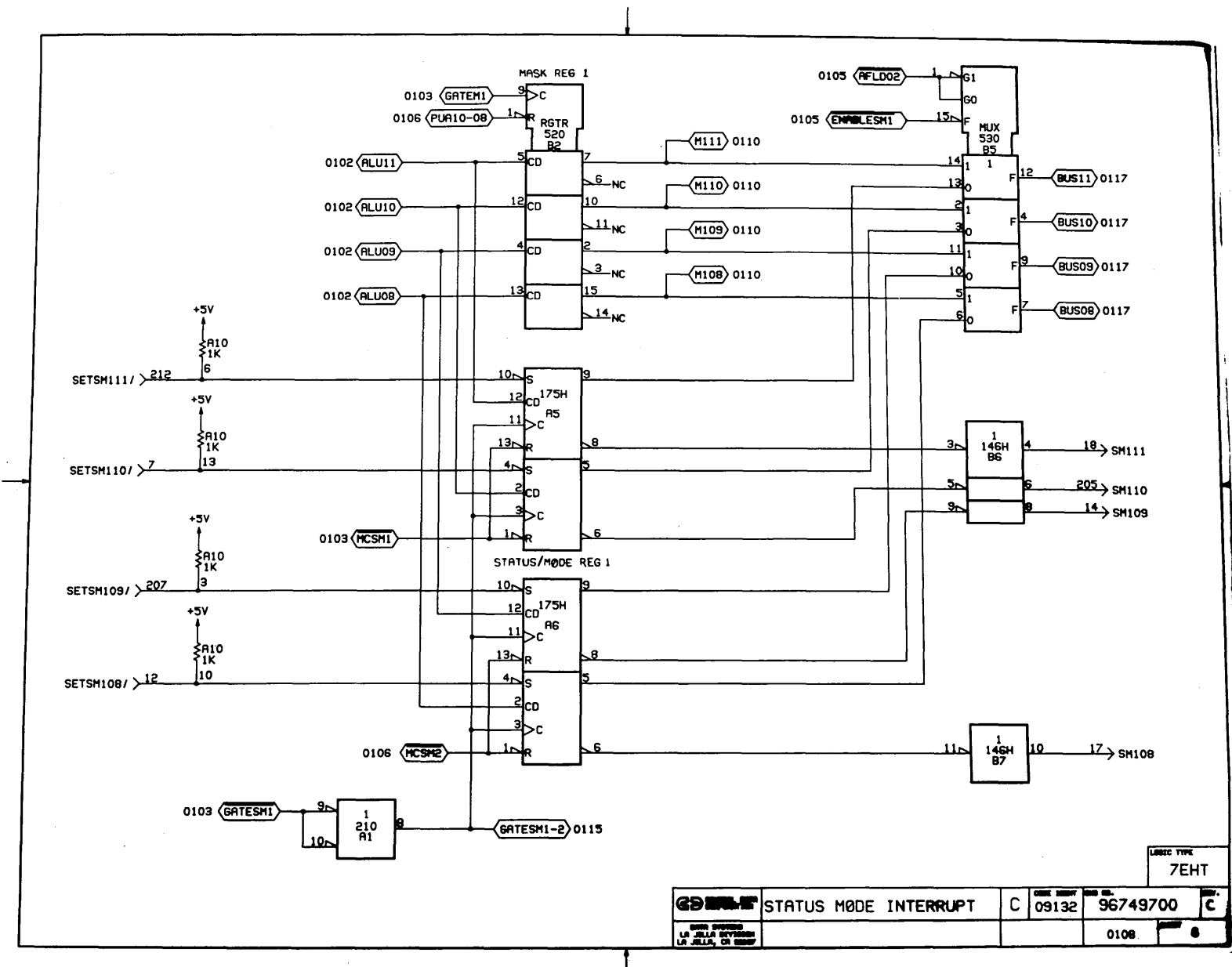


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 9 of 18)

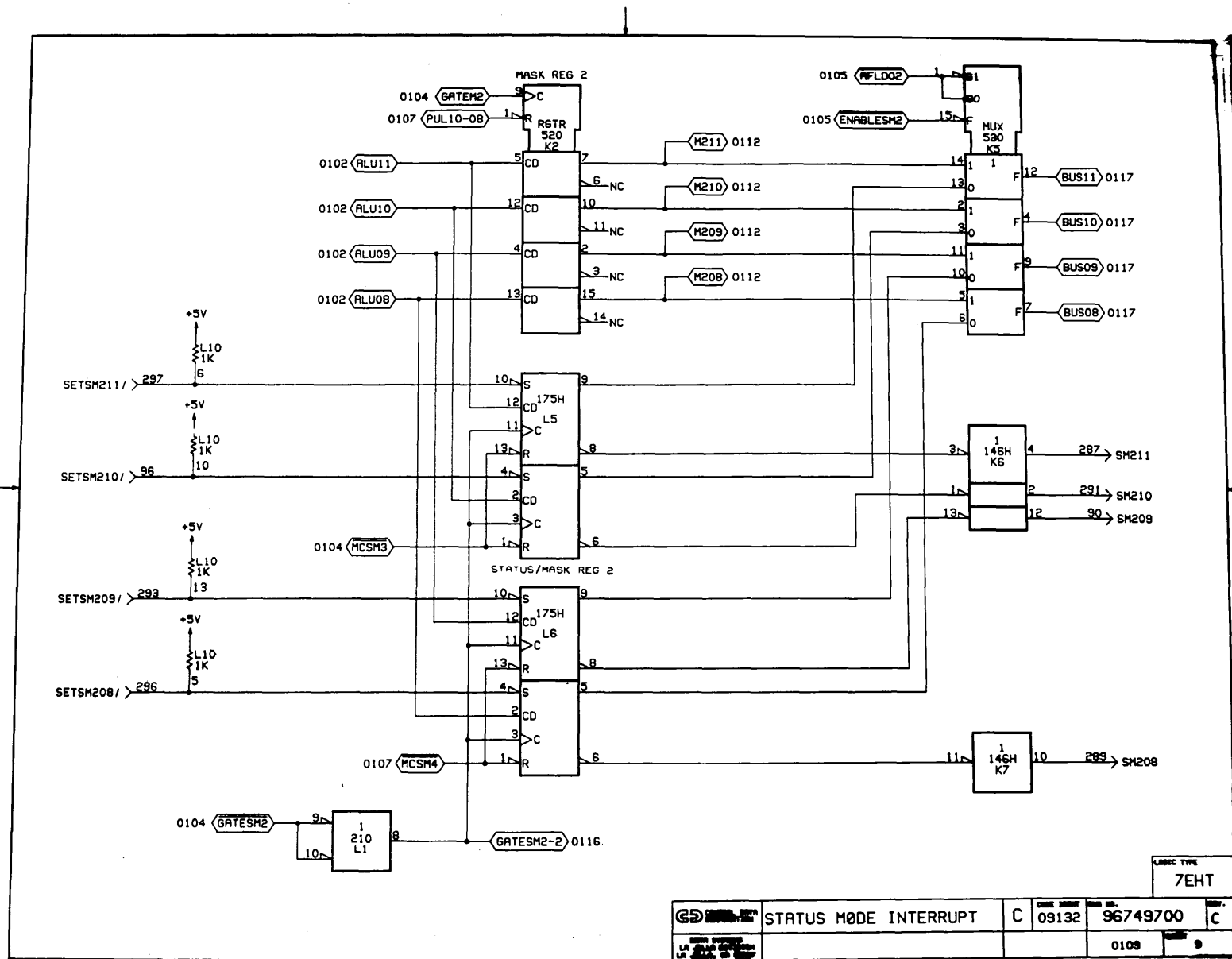


Figure 1-8. Status Mode Interrupt (SMI) (PMA 88909100) Logic Diagram (Sheet 10 of 18)

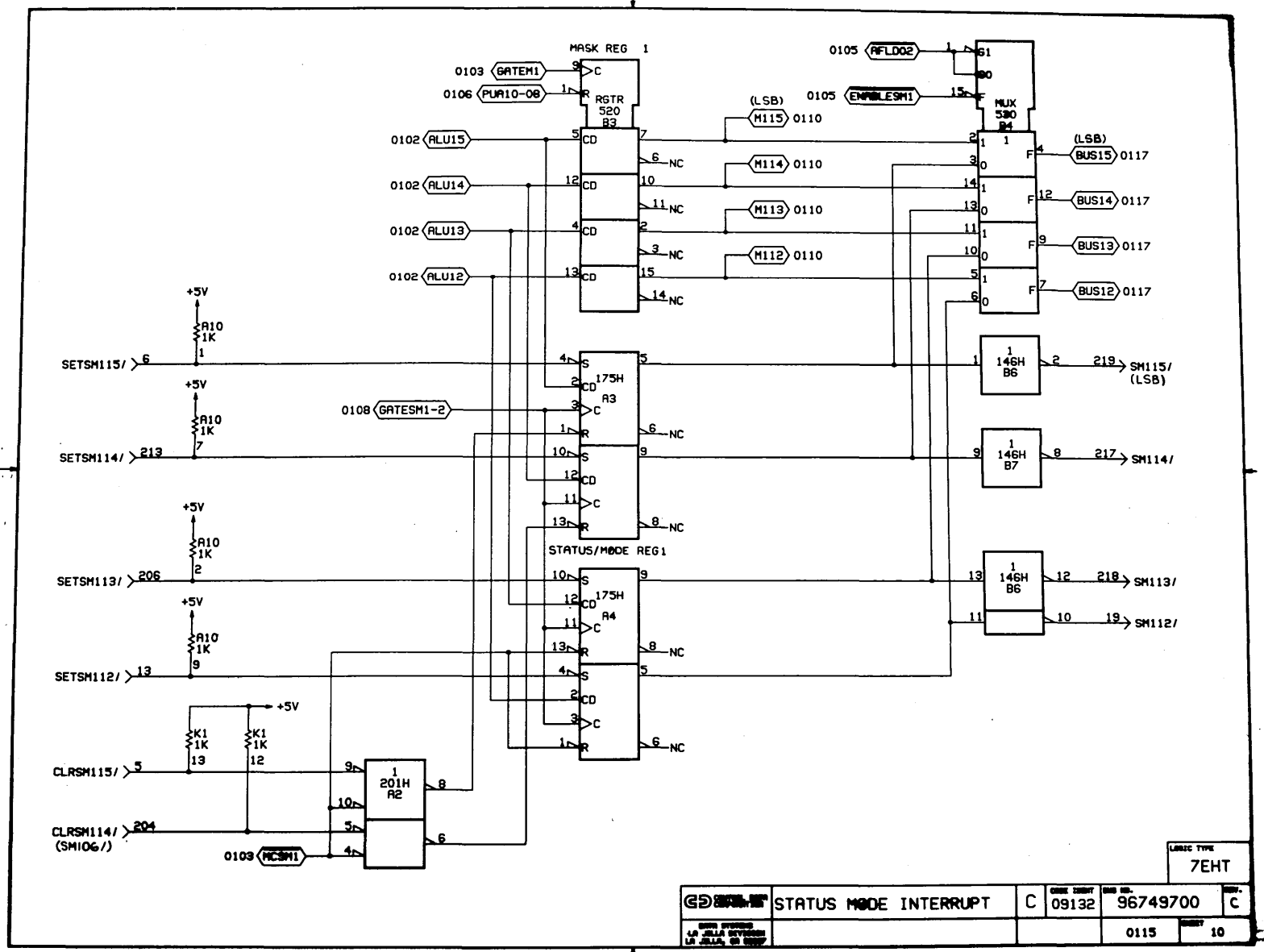


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 11 of 18)

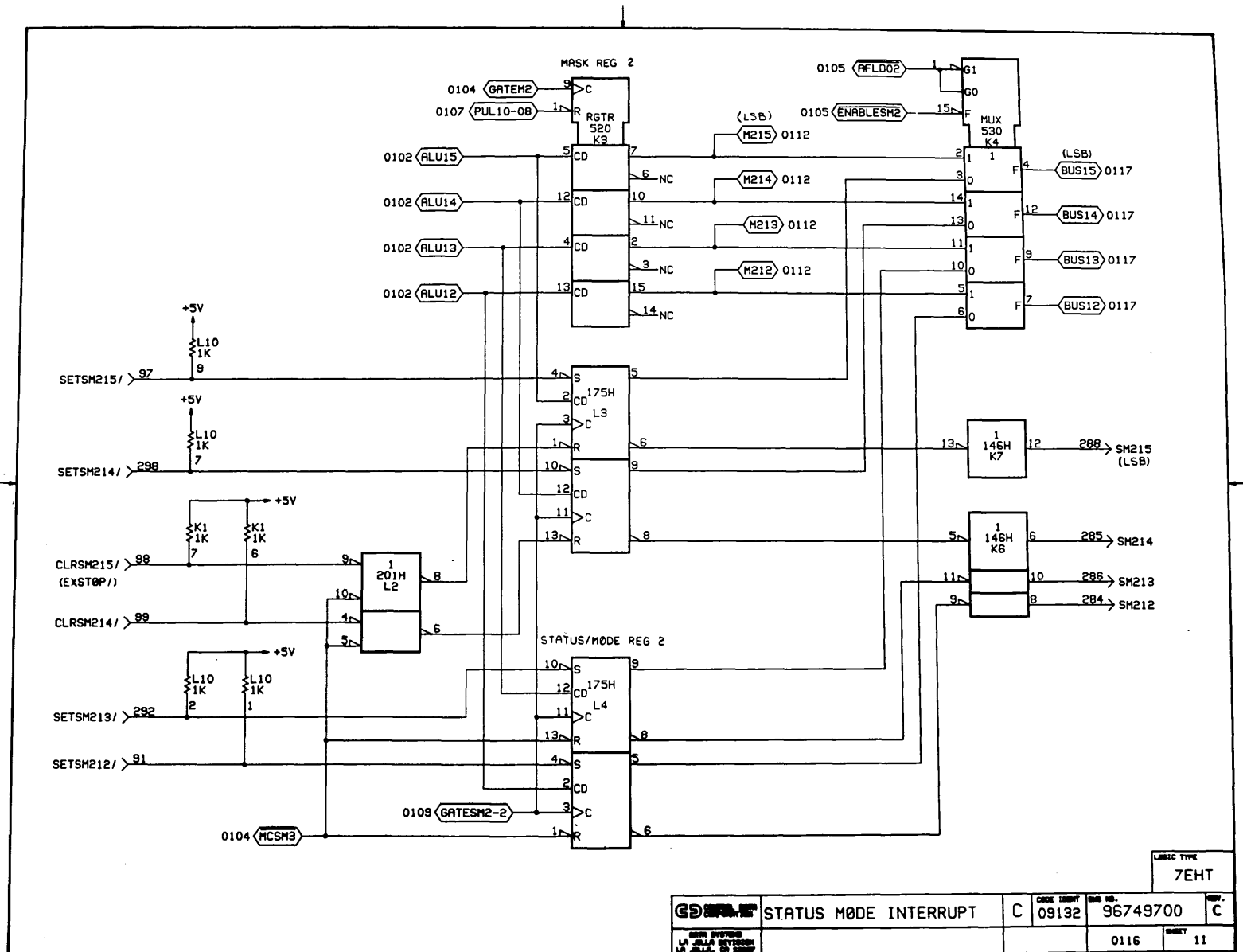


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 12 of 18)

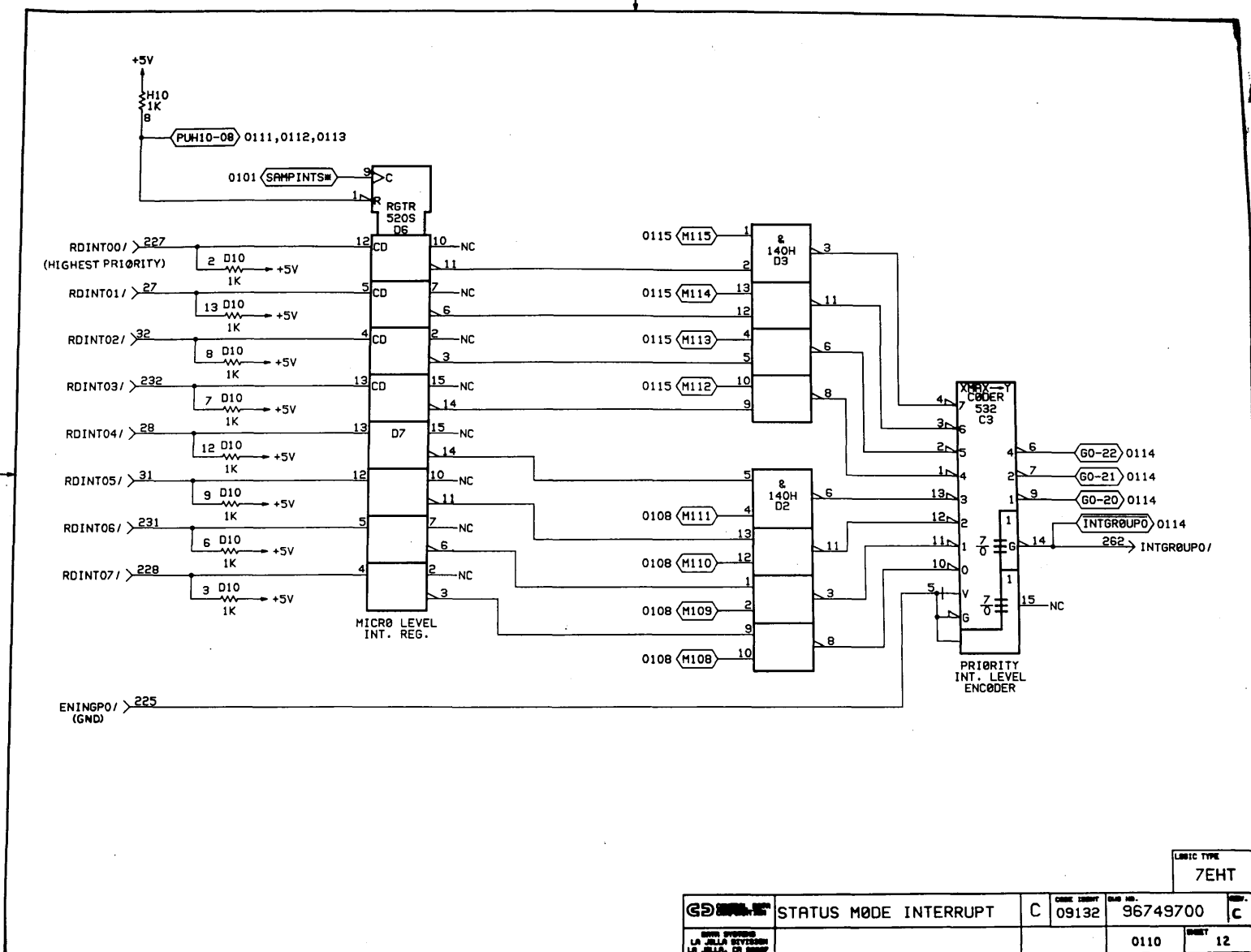
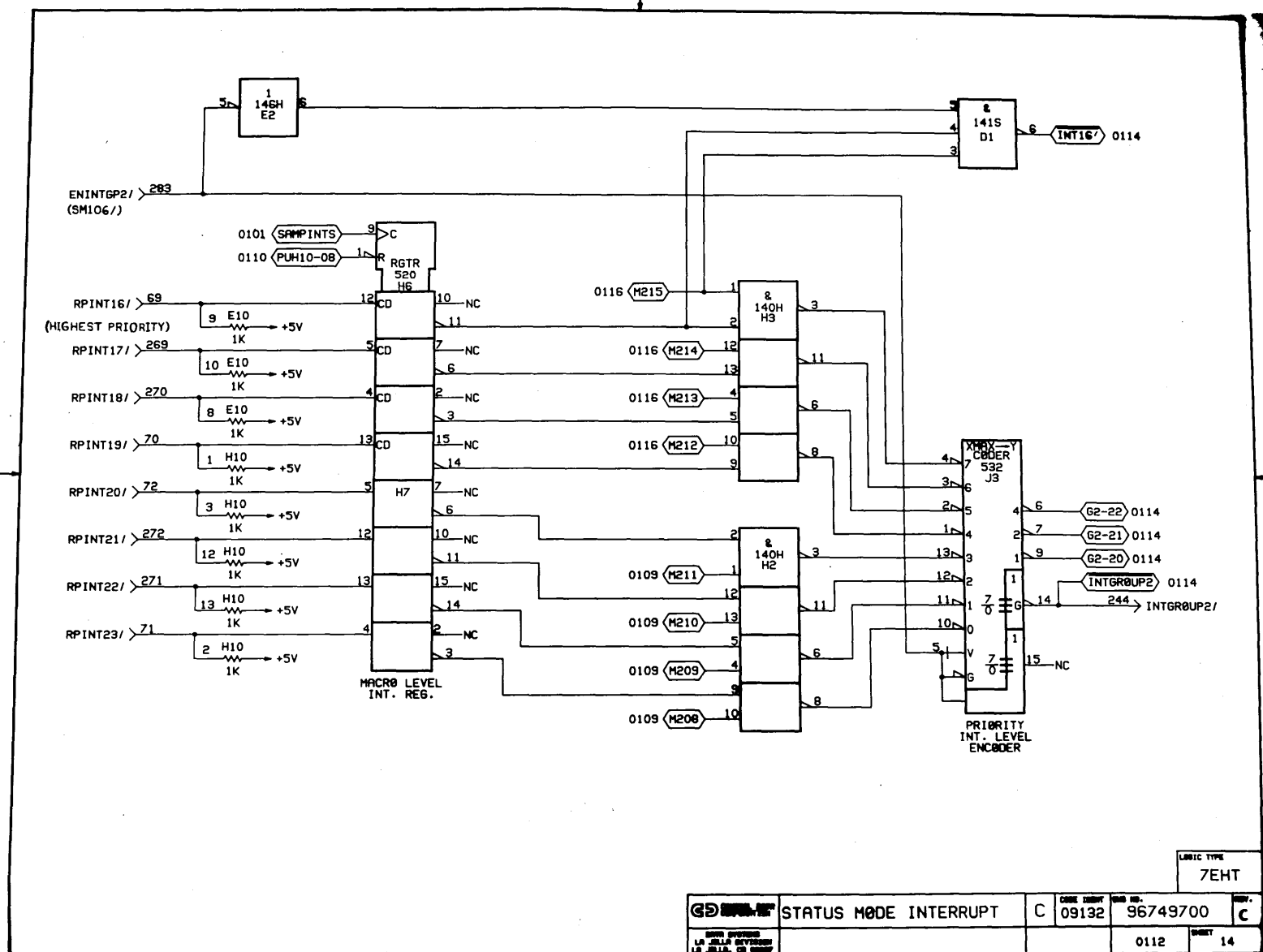


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 14 of 18)



LOGIC TYPE			
7EHT			
GD	STATUS MODE INTERRUPT	C	09132
LA	LA	LA	LA
0112	0112	0112	0112
14	14	14	14

Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 15 of 18)

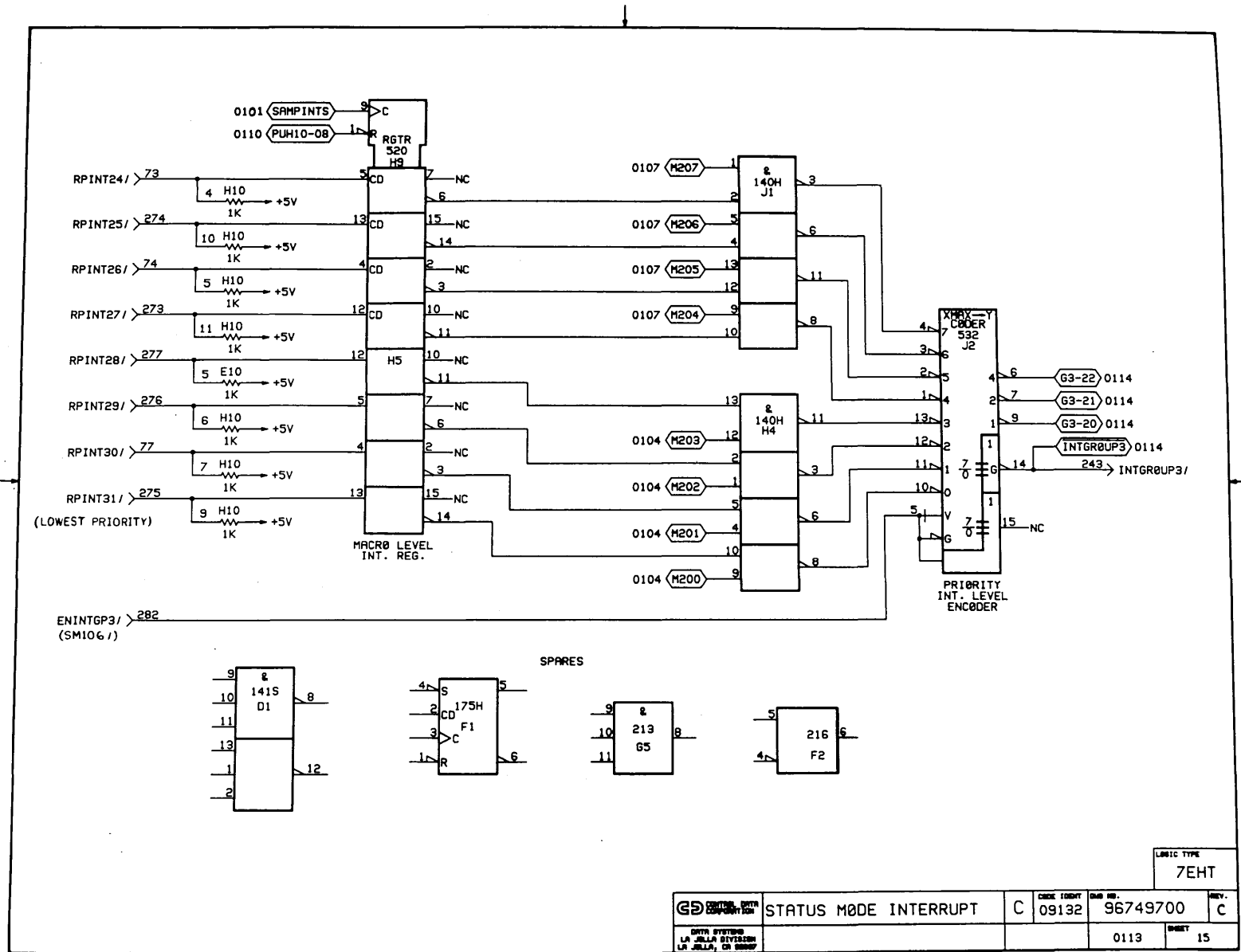


Figure I-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 16 of 18)

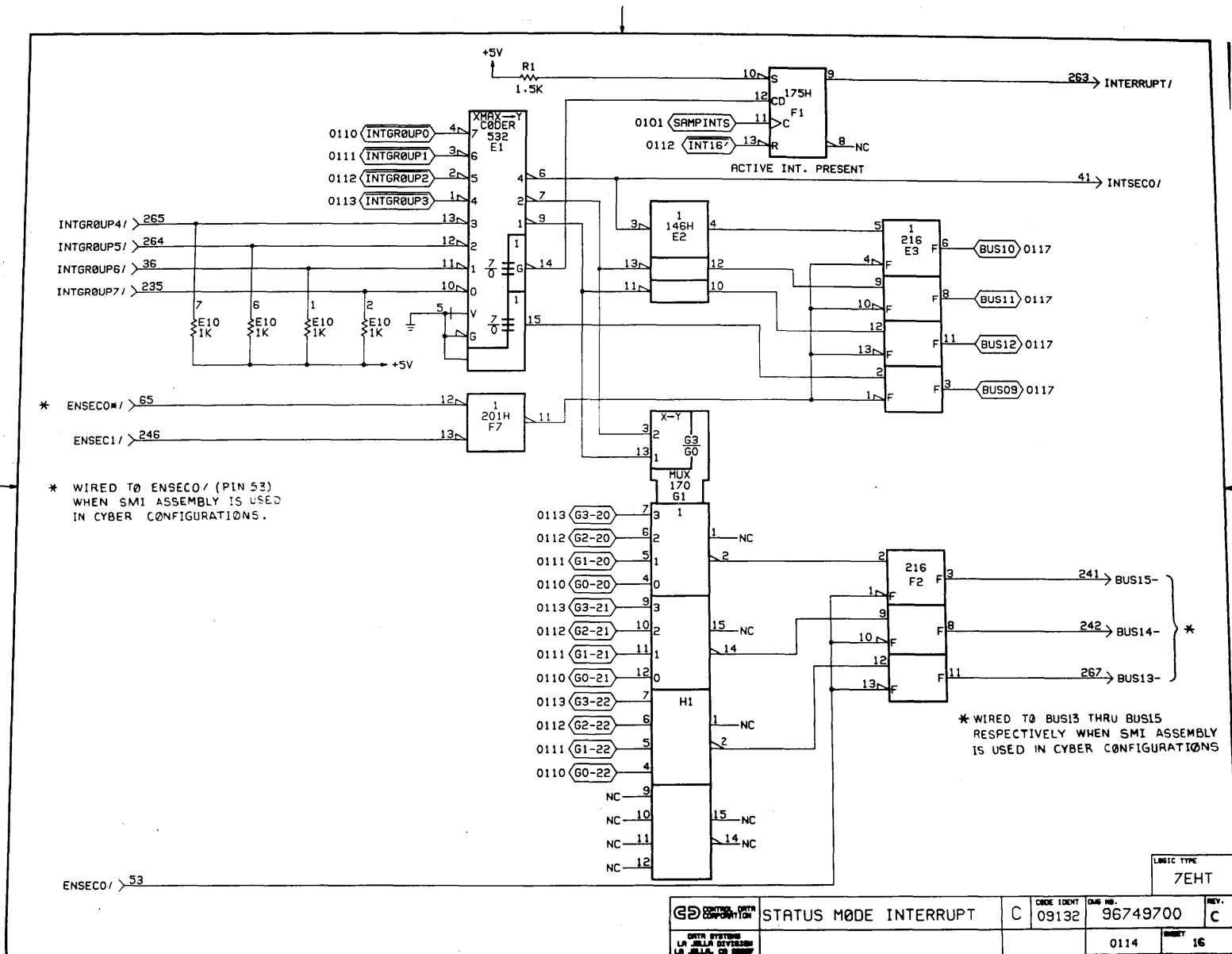


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 17 of 18)

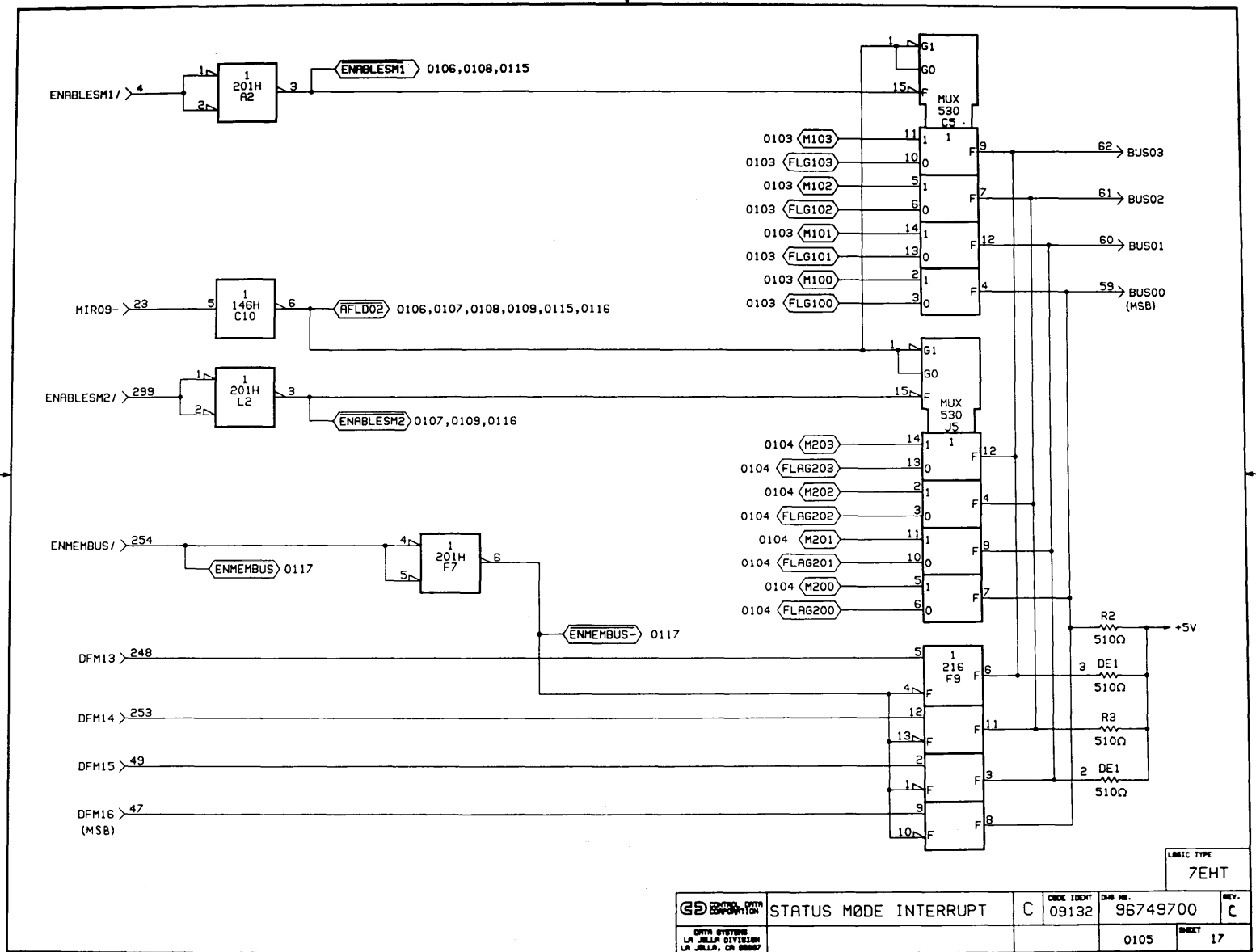


Figure 1-8. Status Mode Interrupt (SMI) (PWA 88909100) Logic Diagram (Sheet 18 of 18)

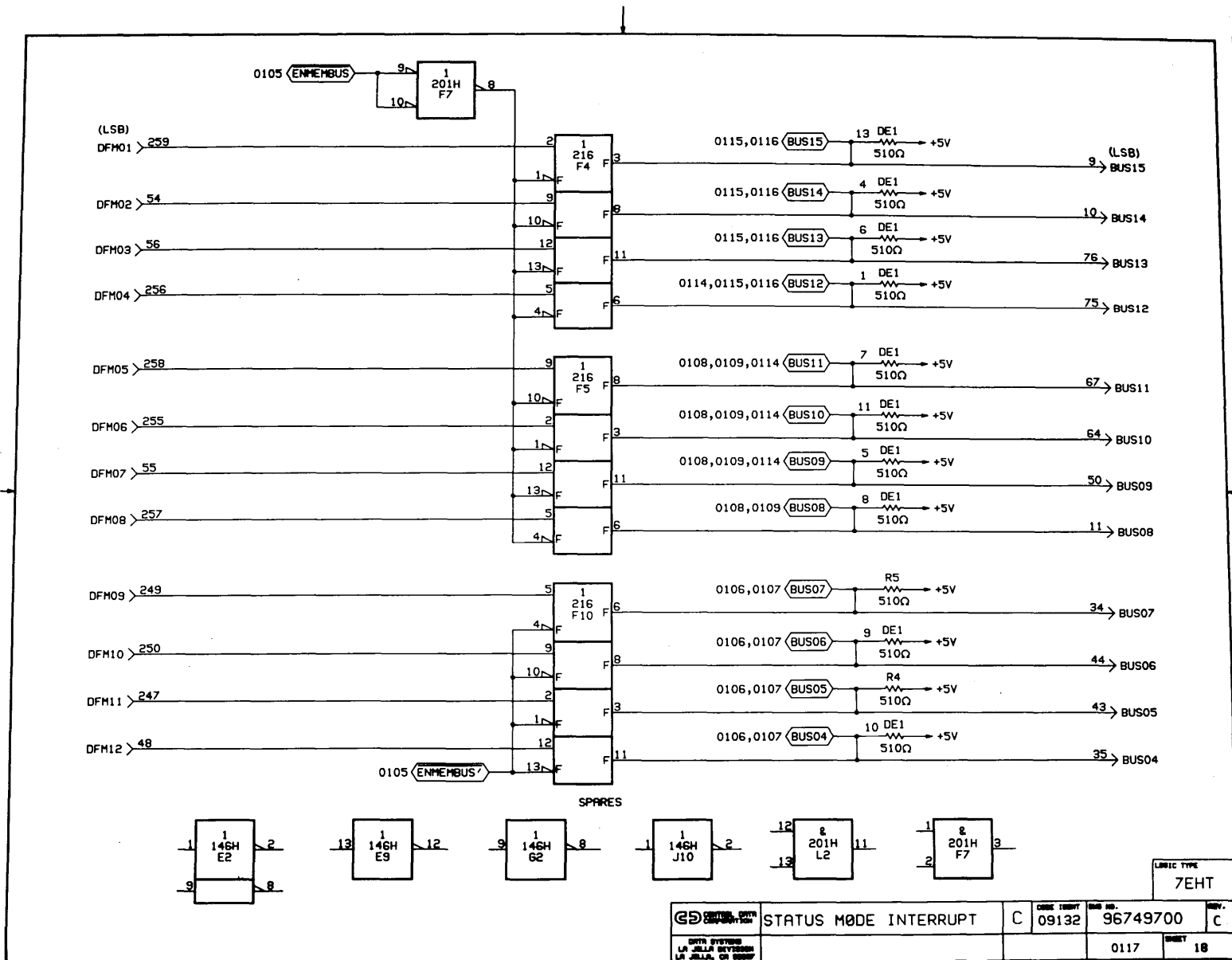


Figure I-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 1 of 15)

REV	CHANGE	ER NO	DFTS	CHECK	APPD	DATE
A	RELEASED TO PRODUCTION	05-21059	—	—	—	—
FOR REVISIONS SEE (DR) DETACHED REVISIONS						
INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.						
96752182						
REF 315-0533595						
MG	RFC NO	PLANT LOC	DESCRIPTION	INTERPLANT USAGE (CODE)	REQD	NEXT ASSEMBLY
MANUFACTURING OPTION FOR USE ONLY AT PLANT SHOWN				REPLACES DWG		
THIS DRAWING AND ANY ATTACHMENTS THERETO AND INFORMATION THEREON ARE THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED				NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA		
CLASS	MODEL	PLANT	CLASS	MODEL	PLANT	CLASS
MP17	-	35				MP17
MP17	-	MP				MP17
DRAFTING OF THE ASSEMBLY			UNIT: PROCESSOR NAME: SCHEMATIC-LOGIC, INTERNAL IO/TTY			
SHEET NO			96752183 315-0533595			
SIZE			DESIGNER: OVERHOLT CHKR: J. CASHION			
APPL			APPD: CODE: —			
COVER SHEET			SHEET 1 OF 18			

NOTES: (UNLESS OTHERWISE SPECIFIED)

- GROUND PINS: 53, 54, 79, 80, 101, 102, 225, 226, 236, 246, 301, 302.
- +5 VOLT PINS: 1, 2, 201, 202.
- 5 VOLT PINS: 100, 300.
- +12 VOLT PINS: 52.
- 12 VOLT PINS: 51.
- FILTER CAPACITOR REF DESIGNATOR: C11, C12, C13, C14, C15, C16, C17, C18, C19, C21, C22, C23, C24, C25, C27, C30, C32, C33, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60.
- FILTER CAPACITOR REF DESIGNATOR: C20 (+12V), C31 (-12V)
- HIGHEST REFERENCE DESIGNATOR USED: A10, B10, C60, CR3, D10, DE6, E10, F10, G10, H10, J10, K10, L10, M10, Q2, R12, SW1.
- REFERENCE DESIGNATORS NOT USED: A1, ~~A2~~, B1, B4, C1, D6, DE1 THRU DE5, E6, J4, J5, L1, L2, L3, M1.

UNIT		PROCESSOR	A	REV
NAME		SCHEMATIC-LOGIC, INTERNAL	315-0533595	A
IO/TTY		NCR PROPRIETARY SHEET 2 OF 18		

Figure 1-9. I/O-TTY Controller (PWA 96752182) Logic Diagram (Sheet 2 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
ADR01/		50	9-C5	
ADR02/		47	9-C5	(M05)SMB7/
ADR03/		46	9-C5	(M05)SMB8/
ADR04/		45	9-B5	(M05)SMB9/
ADR05/		12	9-B5	(M05)SPOS01/
ADR06/		17	9-A5	(M05)SPOS02/
ADR07/		22	9-A5	(M05)SPOS03/
ADR08/		37	9-D2	
ADR09/		252	9-C2	
ADR10/		251	9-C2	
ADR11/		63	9-B2	
ADR12/		283	9-B1	
ADR13/		67	17-D5	
ADR14/		66	17-C5	
ADR15/		265	17-C5	
ADR16/		266	17-C5	
AUTO-DATA/	286		17-B6	
BUS00		259	16-C1	
BUS01		260	16-C1	
BUS02		261	16-C1	
BUS03		262	16-C1	
BUS04		235	11-B2	
BUS05		243	11-A2	
BUS06		244	11-A2	
BUS07		234	11-A2	
BUS08		211	15-D1	
BUS09		250	15-C1	
BUS10		264	15-C4	
BUS11		267	15-B4	
BUS12		275	15-A4	
BUS13		276	15-A4	
BUS14		210	15-B1	
BUS15		209	15-B1	

NCR	UNIT: PROCESSOR	94752183 315-0533595	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL			★
	IO/TTY			NCR PROPRIETARY

NCR-DPD 8-1483

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
CHARINPUT/		65	11-B4	RDIROUT
CPU-EDS/	271		18-C3	
CPU-PROT/	77		17-A5	
DS-SWNC	82		18-C6	
DS-SWNO	281		18-C8	
DSUARTCLK		206	10-C4	
ENABLEIO/	245		15-D8	
ENMMWRITE		216	18-A3	
ENMMWRTPNL	217		18-A5	
EXSTOP/		72	18-B1	
GATEIOADR/	27		9-C8	
GATEIODAT/	227		9-D8	
IO-TTYIN	237		11-D6	
IO-TTYOUT		232	11-C1	
MC/	274		18-C4	
MC-S/		74	18-D2	
MC-SWNC	83		18-D8	
MC-SWNO	282		18-D8	
MCDELAYED/	278		13-A7	
MICROSTRT/		73	18-D2	
MIR12-	64		15-D8	
MI-SWNC	231		12-B5	
MI-SWNO	233		12-B6	
MR/		277	13-A4	

NCR	UNIT: PROCESSOR	94752183 315-0533595	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL			★
	IO/TTY			NCR PROPRIETARY

NCR-DPD 8-1483

Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 3 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
MULTIND		213	18-A3	
MULTINDPNL	214		18-A5	
OSC4.9152	230		10-C8	
PNL-BAUD0		90	10-A4	
PNL-BAUD1		91	10-A4	
PNL-TTL0UT	70		11-B4	
PNLPRES/	84		14-B6, 18-D4	
PROG-PROT/		292	17-A3	
PROT-PNL/	62		18-B5	
PROTECT/		61	18-B3	
PNL MODENA	221		14-D6	
RDINT01/		242	12-C1	TTY-ADT-INT/
RDINT08/		86	16-A3	DATAINT8/(CLK)
RDINT12/		85	14-C1	PNLKEYINT/
RDINT13/		272	14-B1	PNLTBPRINT
RDYSTATUS	32		12-C2, 15-B2	NOT USED
RD01/	4		15-B4	
RD02/	6		15-B4	
RD03/	8		15-A7	
RD04/	10		15-A7	
RD05/	14		15-B7	
RD06/	18		15-C6	
RD07/	21		15-C4	
RD08/	24		15-C4	
RD09/	26		11-A6	
RD10/	29		11-A6	
RD11/	31		11-A6	
RD12/	34		11-B6	
RD13/	36		16-C3	

NCR	UNIT: PROCESSOR	96752183 315 0533595	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL			A
	IO/TTY			NCR PROPRIETARY

NCR-DPD E-1463

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
RD14/	39		16-C3	
RD15/	41		16-C3	
RD16/	44		16-C3	
READ-SSTB/	48		16-B8	(M05)SSTB/
REJECT/	20		13-D2, 15-B8	(M05)RPOS03/
REPLY/	16		13-D2, 15-B8	(M05)RPOS02/
RESYNC-I/O	68		15-B8	
RPINT17/		58	12-A2	
RPINT24/		285	16-B1	PROGINT/
RS232IN-1	42		11-D4	
RS232IN-2	69		11-C4	
RS232OUT-1		249	11-C1	
RS232OUT-2		247	10-D1	
RTERM/	13		15-B8	
SD01/		3	9-D7	
SD02/		5	9-C7	
SD03/		7	9-C7	
SD04/		9	9-B7	
SD05/		11	9-B7	
SD06/		15	9-B7	
SD07/		19	9-A7	
SD08/		23	9-D3	
SD09/		25	9-C3	
SD10/		28	9-C3	
SD11/		30	9-C3	
SD12/		33	9-B3	
SD13/		35	9-B3	
SD14/		38	9-B3	
SD15/		40	17-D7	
SD16/		43	17-D7	

NCR	UNIT: PROCESSOR	96752183 315 0533595	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL			A
	IO/TTY			NCR PROPRIETARY

NCR-DPD E-1463

Figure 1-9. I/O-TTY Controller (PWA 96752182) Logic Diagram (Sheet 4 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
SELGETMAK/	270		18-C3	
SELSKIP/		59	18-B3	
SELSKIPNL/	60		18-B5	
SELSTOP/		269	18-B3	
SELSTOPNL/	268		18-B5	
SETSM204/		273	18-C3	
SM204/	88		10-B5, 14-D6	
SM210/	218		18-A5	
SM211/	219		18-A5	
SM212/	220		18-C8	
SPT0/		99	17-C1	
SPT1/		98	17-C1	
SPT2/		97	17-C1	
SPT3/		96	17-C1	
SPT4/		94	17-C1	
SPT5/		93	17-C1	
SPT6/		95	17-C1	
SPT7/		92	17-C1	
SSEL0/		293	17-B1	
SSEL1/		294	17-B1	
SSEL2/		295	17-B1	
SSEL3/		290	17-B1	
SSEL4/		296	17-B1	
SSEL5/		297	17-B1	
SSEL6/		298	17-B1	
SSEL7/		299	17-A1	
STERM/	49		16-B8	
S300/	254		17-D8	
S301/	256		17-D8	
S302/	255		9-B4	
S303/	253		9-B4	
S304/	239		9-B4	

NCR	UNIT: PROCESSOR	96752183	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL	315-0533595		
	IO/TTY	NCR PROPRIETARY	SHEET 7 OF 18	

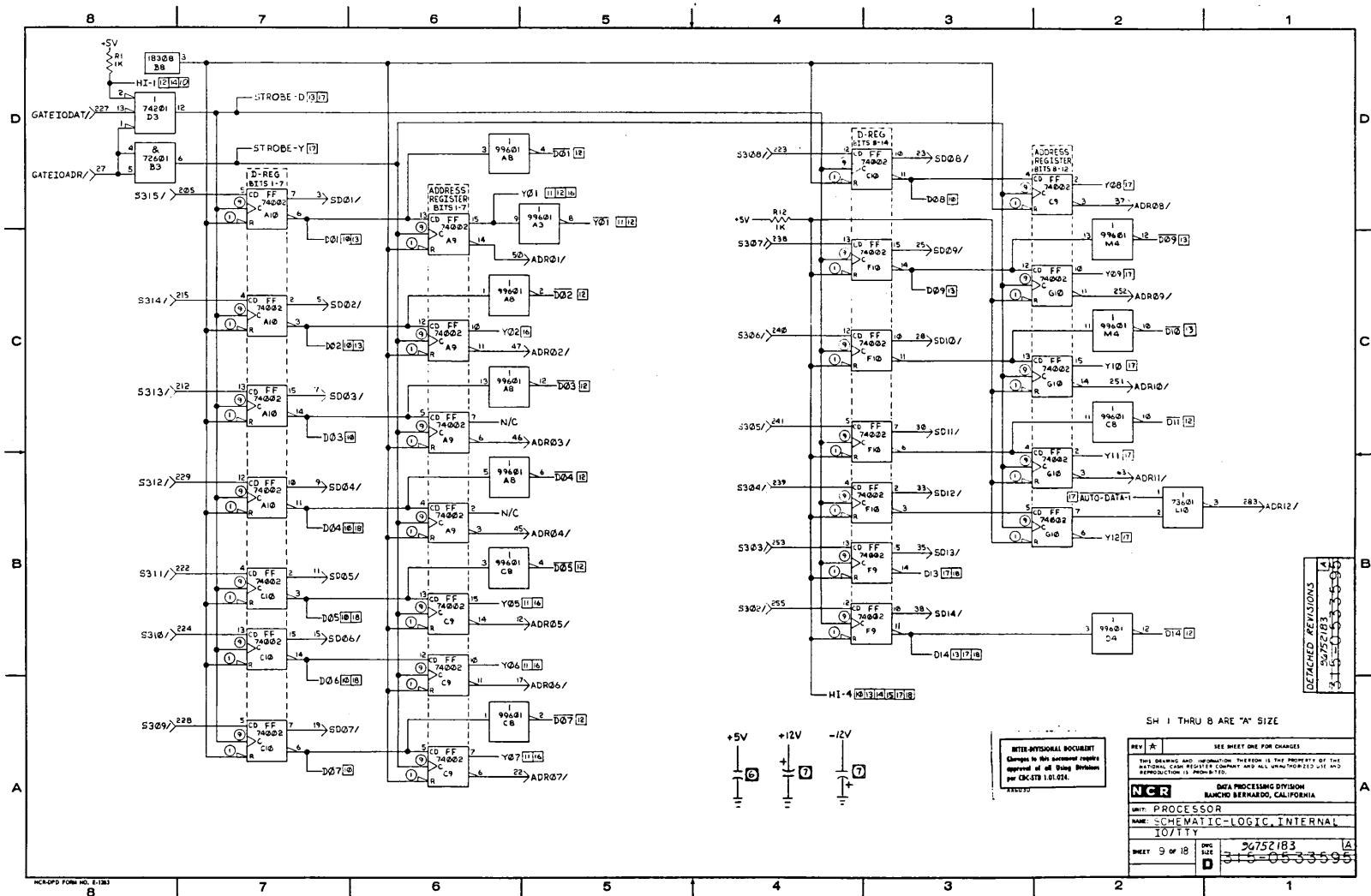
NCR-DPD E-1483

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
S305/	241		9-C4	
S306/	240		9-C4	
S307/	238		9-C4	
S308/	223		9-D4	
S309/	228		9-A8	
S310/	224		9-B8	
S311/	222		9-B8	
S312/	229		9-B8	
S313/	212		9-C8	
S314/	215		9-C8	
S315/	205		9-D8	
TTL-SERL1	248		11-D4	
TTL-SRL2		76	11-D1	
TTYUARTOUT		263	10-C1	
WEO/	257		17-D3	
WRITE/	291		17-B5	
		208	12-D1	NOT USED

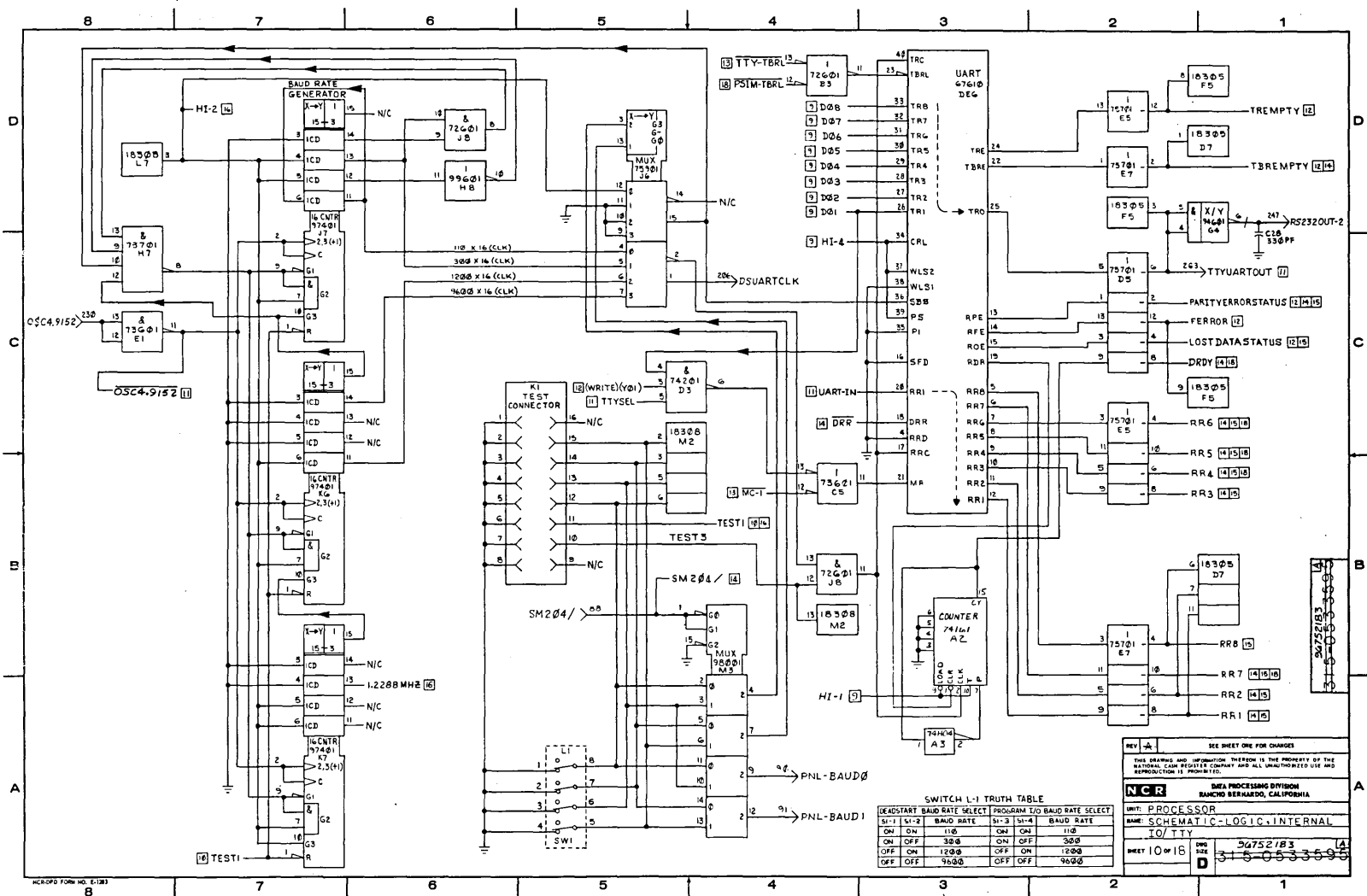
NCR	UNIT: PROCESSOR	96752183	A	REV
	NAME: SCHEMATIC-LOGIC, INTERNAL	315-0533595		
	IO/TTY	NCR PROPRIETARY	SHEET 8 OF 18	

NCR-DPD E-1483

Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 5 of 15)

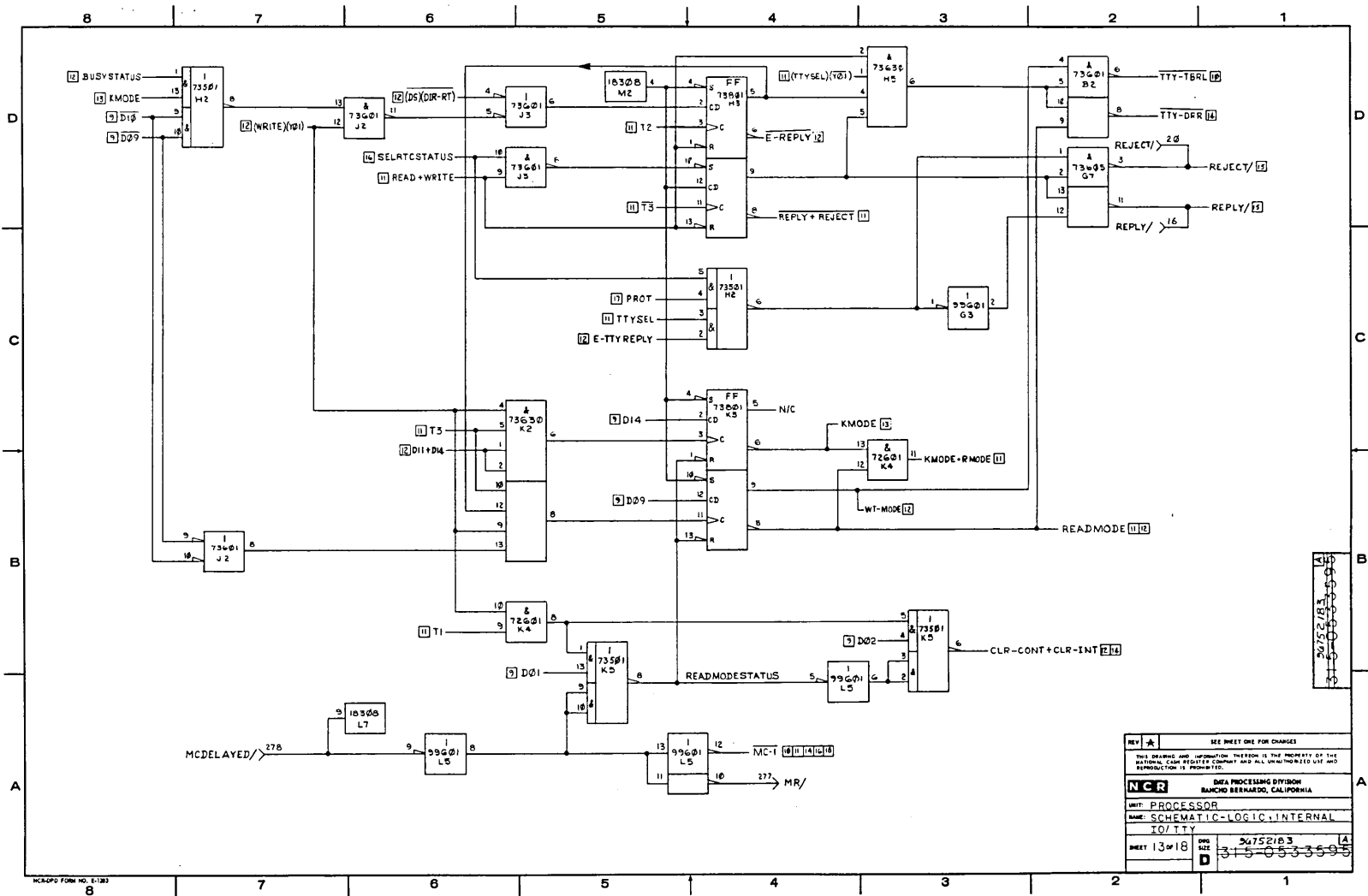


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[illegible]

Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 9 of 15)



[illegible]

Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 11 of 15)

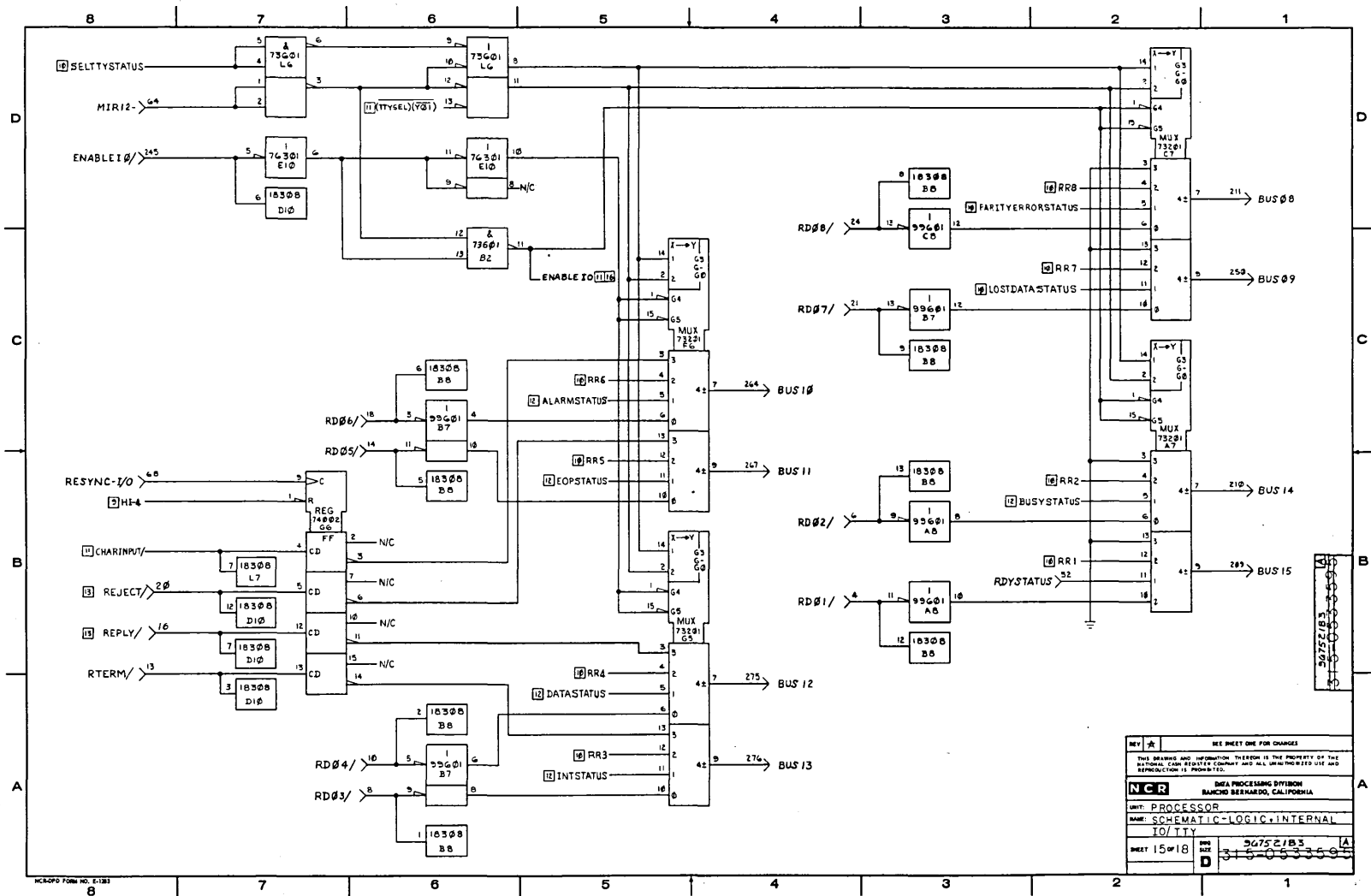


Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 12 of 15)

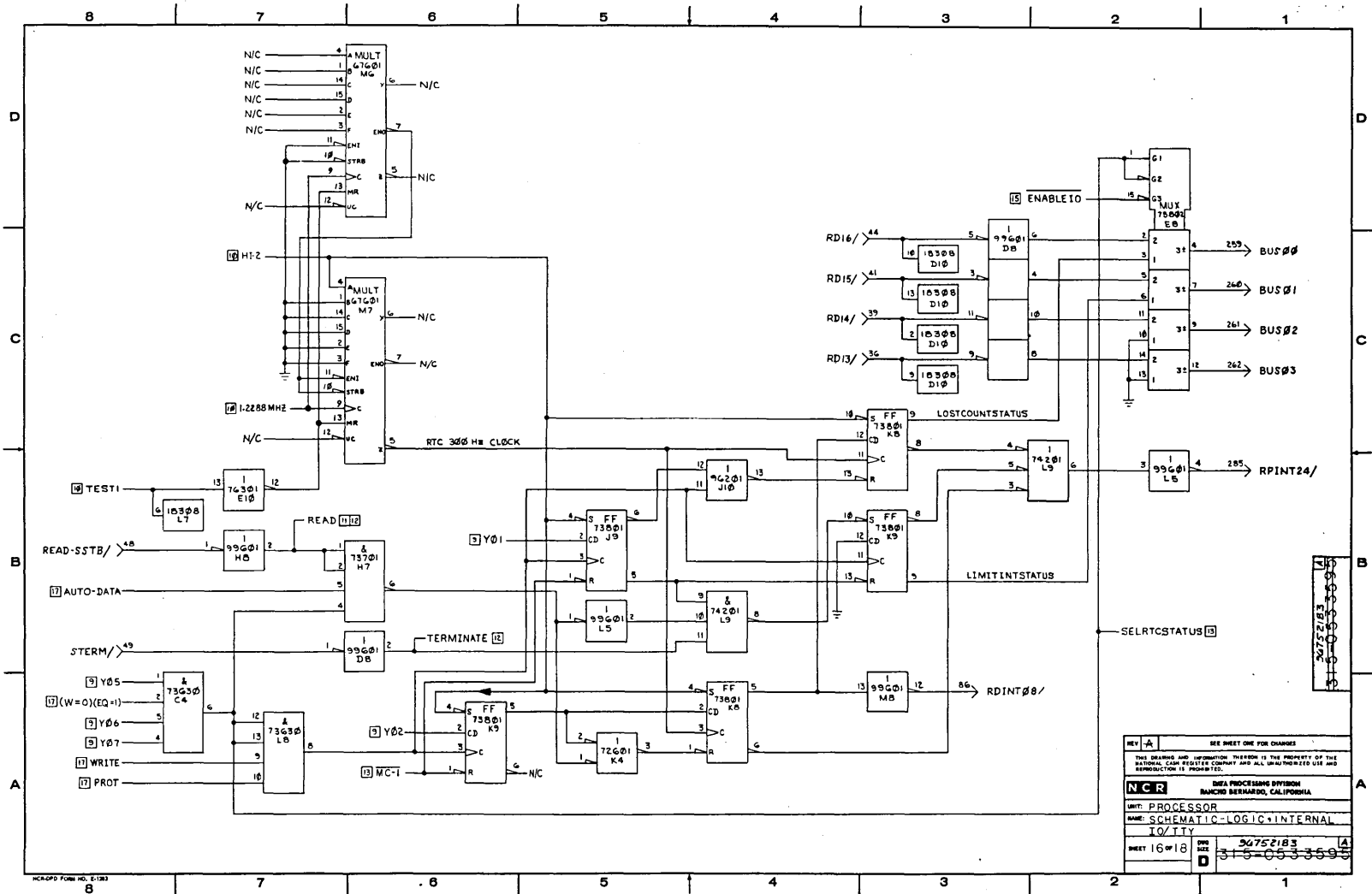


Figure 1-9. I/O-TTY Controller (PMA 96752182) Logic Diagram (Sheet 13 of 15)

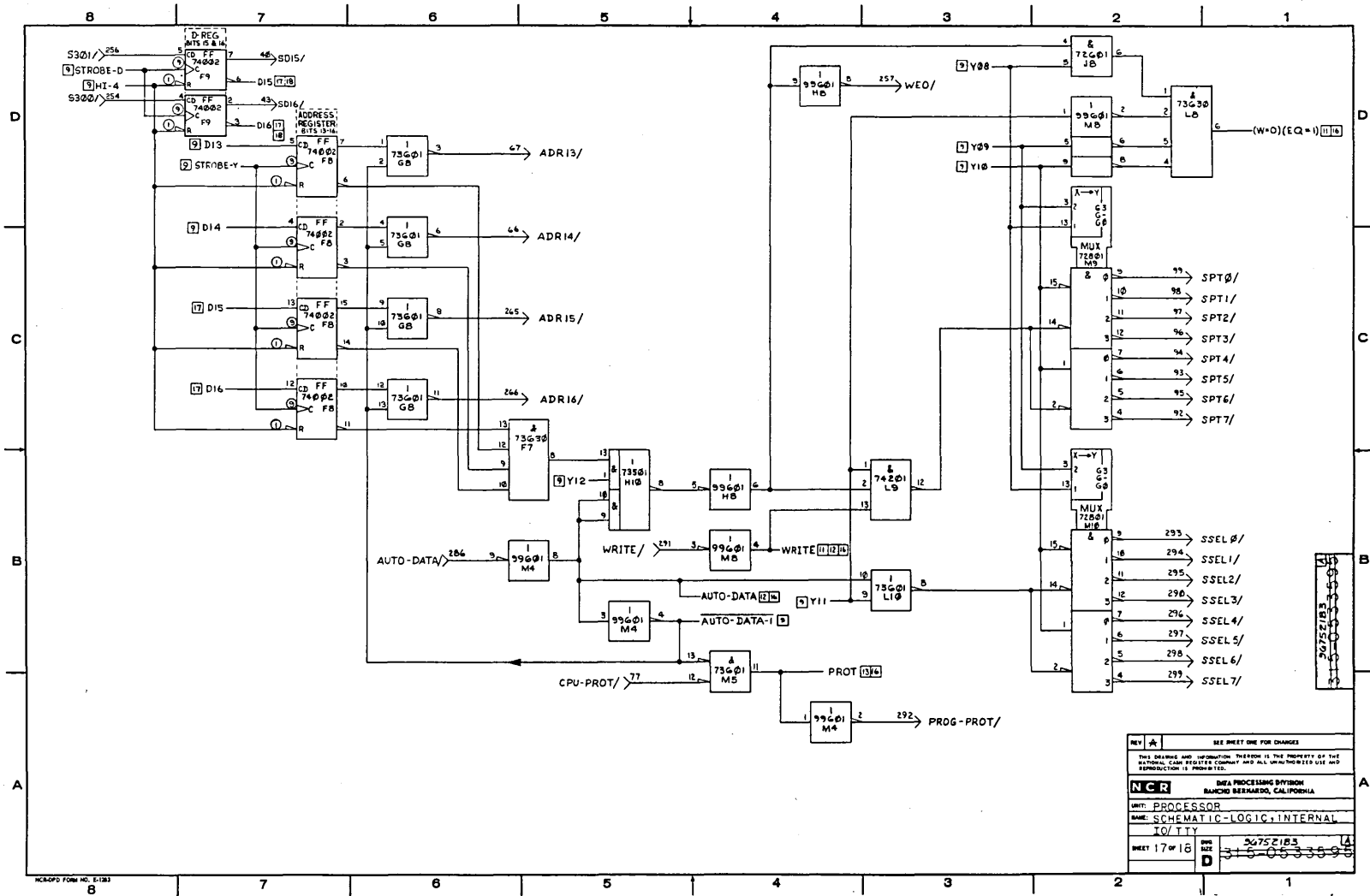
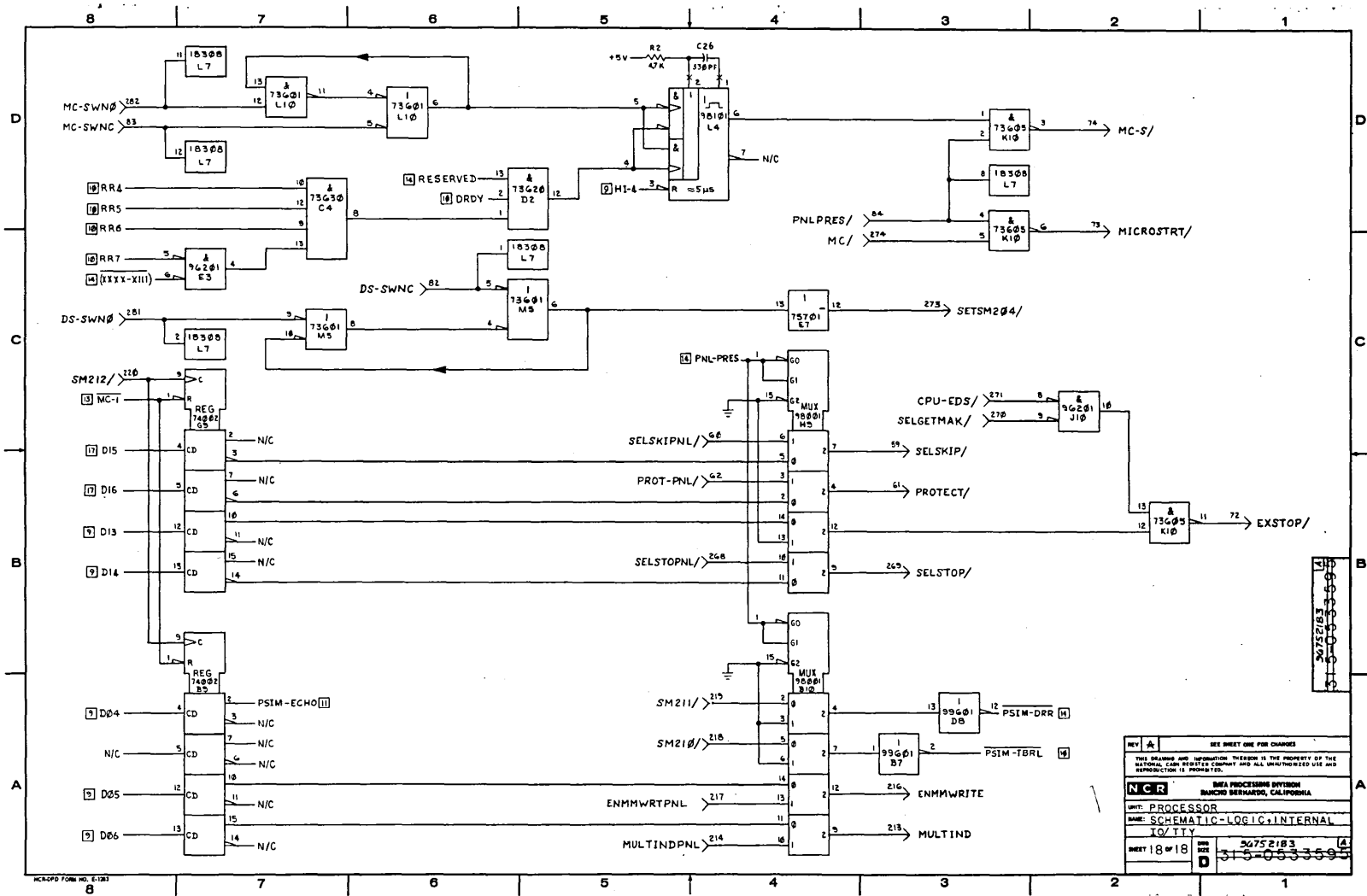


Figure 1-9. I/O-TTY Controller (PWA 96752182) Logic Diagram (Sheet 14 of 15)



DWN			TITLE	LOGIC DIAGRAM-INTERNAL 170 TTY (B4) BGZT		PREFIX	DOCUMENT NO.	REV.		
CHKD						DR	96752183	A		
ENG										
MFG			DATA SYSTEMS LAJOLLA DIVISION	FIRST USED ON	CYBER 18		SHEET	10F1		
APPR			CODE IDENT 09132							
SHEET REVISION STATUS				REVISION RECORD						
				REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
				A	DSZ1059	CL A RELEASEL	BH	10-13-78	AW	AW
INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CBC-STD 1101.024.										
NOTES:				AA6030						
				DETACHED LISTS						

Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 1 of 14)

DETACHED LISTS					DR 96752180																																																																																																																																																																																																																																																																																																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>FUNCTION</th> <th>INPUT PIN</th> <th>OUTPUT PIN</th> <th>PAGE/ZONE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td>ADR01/</td><td></td><td>50</td><td>A-D5</td><td></td></tr> <tr><td>ADR02/</td><td></td><td>47</td><td>A-C5</td><td>(MOS)SM07/</td></tr> <tr><td>ADR03/</td><td></td><td>46</td><td>A-C5</td><td>(MOS)SM08/</td></tr> <tr><td>ADR04/</td><td></td><td>45</td><td>A-B5</td><td>(MOS)SM09/</td></tr> <tr><td>ADR05/</td><td></td><td>12</td><td>A-B5</td><td>(MOS)SP0601/</td></tr> <tr><td>ADR06/</td><td></td><td>17</td><td>A-A5</td><td>(MOS)SP0502/</td></tr> <tr><td>ADR07/</td><td></td><td>22</td><td>A-A5</td><td>(MOS)SP0503/</td></tr> <tr><td>ADR08/</td><td></td><td>37</td><td>A-D1</td><td></td></tr> <tr><td>ADR09/</td><td></td><td>252</td><td>A-C1</td><td></td></tr> <tr><td>ADR10/</td><td></td><td>251</td><td>A-C1</td><td></td></tr> <tr><td>ADR11/</td><td></td><td>63</td><td>A-B1</td><td></td></tr> <tr><td>ADR12/</td><td></td><td>283</td><td>A-B1</td><td></td></tr> <tr><td>ADR13/</td><td></td><td>67</td><td>12-B6</td><td></td></tr> <tr><td>ADR14/</td><td></td><td>66</td><td>12-C6</td><td></td></tr> <tr><td>ADR15/</td><td></td><td>265</td><td>12-C6</td><td></td></tr> <tr><td>ADR16/</td><td></td><td>266</td><td>12-D6</td><td></td></tr> <tr><td>AUTO-DATA/</td><td>286</td><td></td><td>12-A6</td><td></td></tr> <tr><td>BUS00</td><td></td><td>259</td><td>11-C1</td><td></td></tr> <tr><td>BUS01</td><td></td><td>260</td><td>11-C1</td><td></td></tr> </tbody> </table>					FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS	ADR01/		50	A-D5		ADR02/		47	A-C5	(MOS)SM07/	ADR03/		46	A-C5	(MOS)SM08/	ADR04/		45	A-B5	(MOS)SM09/	ADR05/		12	A-B5	(MOS)SP0601/	ADR06/		17	A-A5	(MOS)SP0502/	ADR07/		22	A-A5	(MOS)SP0503/	ADR08/		37	A-D1		ADR09/		252	A-C1		ADR10/		251	A-C1		ADR11/		63	A-B1		ADR12/		283	A-B1		ADR13/		67	12-B6		ADR14/		66	12-C6		ADR15/		265	12-C6		ADR16/		266	12-D6		AUTO-DATA/	286		12-A6		BUS00		259	11-C1		BUS01		260	11-C1		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>FUNCTION</th> <th>INPUT PIN</th> <th>OUTPUT PIN</th> <th>PAGE/ZONE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td>BUS02</td><td></td><td>261</td><td>11-B1</td><td></td></tr> <tr><td>BUS03</td><td></td><td>262</td><td>11-C1</td><td></td></tr> <tr><td>BUS04</td><td></td><td>235</td><td>6-B2</td><td></td></tr> <tr><td>BUS05</td><td></td><td>243</td><td>6-B2</td><td></td></tr> <tr><td>BUS06</td><td></td><td>244</td><td>6-A2</td><td></td></tr> <tr><td>BUS07</td><td></td><td>234</td><td>6-B2</td><td></td></tr> <tr><td>BUS08</td><td></td><td>211</td><td>10-D1</td><td></td></tr> <tr><td>BUS09</td><td></td><td>250</td><td>10-D1</td><td></td></tr> <tr><td>BUS10</td><td></td><td>264</td><td>10-C4</td><td></td></tr> <tr><td>BUS11</td><td></td><td>267</td><td>10-C4</td><td></td></tr> <tr><td>BUS12</td><td></td><td>275</td><td>10-B4</td><td></td></tr> <tr><td>BUS13</td><td></td><td>276</td><td>10-A4</td><td></td></tr> <tr><td>BUS14</td><td></td><td>210</td><td>10-B1</td><td></td></tr> <tr><td>BUS15</td><td></td><td>209</td><td>10-B1</td><td></td></tr> <tr><td>CHARINPUT/</td><td>65</td><td></td><td>10-C8</td><td>RDIROUT</td></tr> <tr><td>CPU-EDS/</td><td>271</td><td></td><td>13-C3</td><td></td></tr> <tr><td>CPU-PROT/</td><td>77</td><td></td><td>12-A5</td><td></td></tr> </tbody> </table>					FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS	BUS02		261	11-B1		BUS03		262	11-C1		BUS04		235	6-B2		BUS05		243	6-B2		BUS06		244	6-A2		BUS07		234	6-B2		BUS08		211	10-D1		BUS09		250	10-D1		BUS10		264	10-C4		BUS11		267	10-C4		BUS12		275	10-B4		BUS13		276	10-A4		BUS14		210	10-B1		BUS15		209	10-B1		CHARINPUT/	65		10-C8	RDIROUT	CPU-EDS/	271		13-C3		CPU-PROT/	77		12-A5		<table border="1" style="width: 100%; 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FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS																																																																																																																																																																																																																																																																																																							
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ADR02/		47	A-C5	(MOS)SM07/																																																																																																																																																																																																																																																																																																							
ADR03/		46	A-C5	(MOS)SM08/																																																																																																																																																																																																																																																																																																							
ADR04/		45	A-B5	(MOS)SM09/																																																																																																																																																																																																																																																																																																							
ADR05/		12	A-B5	(MOS)SP0601/																																																																																																																																																																																																																																																																																																							
ADR06/		17	A-A5	(MOS)SP0502/																																																																																																																																																																																																																																																																																																							
ADR07/		22	A-A5	(MOS)SP0503/																																																																																																																																																																																																																																																																																																							
ADR08/		37	A-D1																																																																																																																																																																																																																																																																																																								
ADR09/		252	A-C1																																																																																																																																																																																																																																																																																																								
ADR10/		251	A-C1																																																																																																																																																																																																																																																																																																								
ADR11/		63	A-B1																																																																																																																																																																																																																																																																																																								
ADR12/		283	A-B1																																																																																																																																																																																																																																																																																																								
ADR13/		67	12-B6																																																																																																																																																																																																																																																																																																								
ADR14/		66	12-C6																																																																																																																																																																																																																																																																																																								
ADR15/		265	12-C6																																																																																																																																																																																																																																																																																																								
ADR16/		266	12-D6																																																																																																																																																																																																																																																																																																								
AUTO-DATA/	286		12-A6																																																																																																																																																																																																																																																																																																								
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BUS01		260	11-C1																																																																																																																																																																																																																																																																																																								
FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS																																																																																																																																																																																																																																																																																																							
BUS02		261	11-B1																																																																																																																																																																																																																																																																																																								
BUS03		262	11-C1																																																																																																																																																																																																																																																																																																								
BUS04		235	6-B2																																																																																																																																																																																																																																																																																																								
BUS05		243	6-B2																																																																																																																																																																																																																																																																																																								
BUS06		244	6-A2																																																																																																																																																																																																																																																																																																								
BUS07		234	6-B2																																																																																																																																																																																																																																																																																																								
BUS08		211	10-D1																																																																																																																																																																																																																																																																																																								
BUS09		250	10-D1																																																																																																																																																																																																																																																																																																								
BUS10		264	10-C4																																																																																																																																																																																																																																																																																																								
BUS11		267	10-C4																																																																																																																																																																																																																																																																																																								
BUS12		275	10-B4																																																																																																																																																																																																																																																																																																								
BUS13		276	10-A4																																																																																																																																																																																																																																																																																																								
BUS14		210	10-B1																																																																																																																																																																																																																																																																																																								
BUS15		209	10-B1																																																																																																																																																																																																																																																																																																								
CHARINPUT/	65		10-C8	RDIROUT																																																																																																																																																																																																																																																																																																							
CPU-EDS/	271		13-C3																																																																																																																																																																																																																																																																																																								
CPU-PROT/	77		12-A5																																																																																																																																																																																																																																																																																																								
FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS																																																																																																																																																																																																																																																																																																							
DS-SWNC	82		13-D4																																																																																																																																																																																																																																																																																																								
DS-SWNO	281		13-D4																																																																																																																																																																																																																																																																																																								
DSUARTCLK		206	5-C4																																																																																																																																																																																																																																																																																																								
ENABABLEIQ	245		10-C7																																																																																																																																																																																																																																																																																																								
ENMMWRITE		216	13-B5																																																																																																																																																																																																																																																																																																								
ENMMWRITEHL	217		13-B6																																																																																																																																																																																																																																																																																																								
EXSTOP/		72	13-C1																																																																																																																																																																																																																																																																																																								
GATEIOADR/	27		4-D8																																																																																																																																																																																																																																																																																																								
GATEIODAT/	227		4-D8																																																																																																																																																																																																																																																																																																								
IO-TTYIN	237		6-D7																																																																																																																																																																																																																																																																																																								
IO-TTYOUT		232	6-D1																																																																																																																																																																																																																																																																																																								
MC/	274		13-C5																																																																																																																																																																																																																																																																																																								
MCDELAYED/	278		8-A7																																																																																																																																																																																																																																																																																																								
MC-S/		74	13-C4																																																																																																																																																																																																																																																																																																								
MC-SWNC	83		13-C7																																																																																																																																																																																																																																																																																																								
MC-SWNO	282		13-C7																																																																																																																																																																																																																																																																																																								
MICROSTR/		73	13-C4																																																																																																																																																																																																																																																																																																								
MTR12-	64		10-D7																																																																																																																																																																																																																																																																																																								

3 FILTER CAPACITOR REF DESIGNATOR:
C12 THRU C24, C26, C27, C28, C29,
C36, C37, C38.

2. +5 VOLT PINS: 1, 2, 201, 202.

1. GROUND PINS: 53, 54, 79, 80, 101, 102, 225, 226, 236, 246, 301, 302.

NOTES (UNLESS OTHERWISE SPECIFIED)

4 FILTER CAPACITOR REF DESIGNATOR: C35

CHANGES: (A) RELEASE TO PRODUCTION.

INTERPLANT USAGE (CODE)	REF	315-0536973
REQD	REQD	REQD
NEXT ASSEMBLY		

REPLACES DWS

THIS DRAWING AND INFORMATION THEREON IS THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE:
INCH NOMINAL
.XX ±
.XXX ±

CLASS: MR17
START: FINISH:
DFT: G. ANDERSON
CHGR: J. F. WALL 1/4/74
DESIGNER: D. WALL
APPR: J. F. WALL

UNIT: PROCESSOR
NAME: SCHEMATIC-LOGIC, INTERNAL
IO/TTY-MINI

SHEET 1 OF 13
SCALE: NONE
CODE: N-E

INTER-COMMERCIAL DOCUMENT

Changes to this document require approval of all Using Divisions per CAC-STD 1.01.001.

DATE: 7/1/74

MP17 35

MP17 MP A 35ER 11637

CLASS MODEL PLANT REV RELEASE NO. DFTS DATE CHECK APPD

NCR DATA PROCESSING DIVISION
RANCHO BERNARDO, CALIFORNIA

96752180

Figure 1-10. I/O-TTY Controller (PWA 88909701) Logic Diagram (Sheet 2 of 14)



(25,4) 1 INCH

08125296

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
MI-SWNC	231		7-B6	
MI-SWNO	233		7-C6	
MR		277	8-A6	
MULTIND		213	13-B5	
MULTINDPWL	214		13-B6	
OSCA,9152	230		5-A8	
PWLBAUDQ		90	5-A4	
PWLBAUDI		91	5-A4	
PWLPRES	84		9-C3	
PWLTTLQUT	70		6-C4	
PROG-PROZ		292	12-A4	
PROTECT		61	13-C2	
PROT-PWL	62		13-B3	
PWLMOENA	221		9-A7	
RDINT01		242	7-A3	TTY-ADTINT
RDINT12		85	9-C2	PWLKEYINT
RDINT08		86	11-A3	DATAINT8

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
RDINT13		272	9-B2	PWLTBRINT
RDSTATUS	32		7-C2	NOT USED
RD01	4		10-B4	
RD02	6		10-B4	
RD03	8		10-A6	
RD04	10		10-B6	
RD05	14		10-B6	
RD06	18		10-C6	
RD07	21		10-D4	
RD08	24		10-D4	
RD09	26		6-A5	
RD10	29		6-A5	
RD11	31		6-B5	
RD12	34		6-B5	
RD13	36		11-C3	
RD14	39		11-C3	
RD15	41		11-D3	
RD16	44		11-D3	

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE/ZONE	REMARKS
READ-SSTB	48		11-B8	(MOS)SSTB
REJECT	20		10-B8	(MOS)RPOS8
REPLY	16		10-A8	(MOS)RPOS42
RESYNC-I/O	60		10-A8	
RPINT17		58	7-D4	
RPINT24		285	11-B1	PROGINT
RS232IN-1	42		6-D5	
RS232IN-2	69		6-C5	
RS232OUT-1		249	6-D1	
RS232OUT-2		247	5-C1	
RTERM	13		10-A8	(MOS)RPOS81
SD01		3	4-D6	
SD02		5	4-D6	
SD03		7	4-C6	
SD04		9	4-C6	
SD05		11	4-B6	
SD06		15	4-B6	
SD07		19	4-A6	
SD08		23	4-D3	
SD09		25	4-D3	

8. THIS LOGIC IS FOR PWB PIN 9674421B (NCR NO. 315-0532525)

7. -12 VOLT: PIN51, G5-1, EFG-2.
+12 VOLT: PIN52, G5-14.

6. REFERENCE DESIGNATIONS NOT USED:
A3, A9, B3, B8, B9, C3, C9, C30 THRU
C34, C39, D3, D8, D9, D10, E3, E6, E9,
E10, E11 THRU EF5, F3, F6, F9, F10,
G3, G9, H3, H8, J3, J5, J6, R2, R22.

5. HIGHEST REFERENCE DESIGNATION:
A11, B11, C43, C43, D11, E11, EF6, F11, G11,
H11, J11, K11, L11, M11, Q2, R26.

NOTES (UNLESS OTHERWISE SPECIFIED)

UNLESS OTHERWISE SPECIFIED, DIMENSIONAL LIMITS ARE BOTH NOMINAL
JXX ±.
XXX ±.

REV	A	SEE SHEET ONE FOR CHANGES
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NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA		
UNIT: PROCESSOR		
BASE: SCHEMATIC-LOGIC, INTERNAL		
IO/TTY-MINI		
SHEET 2 OF 13	DRG NO.	96752180
SCALE: NONE	B	

NCR-DPD FORM NO. E-1357

Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 3 of 14)

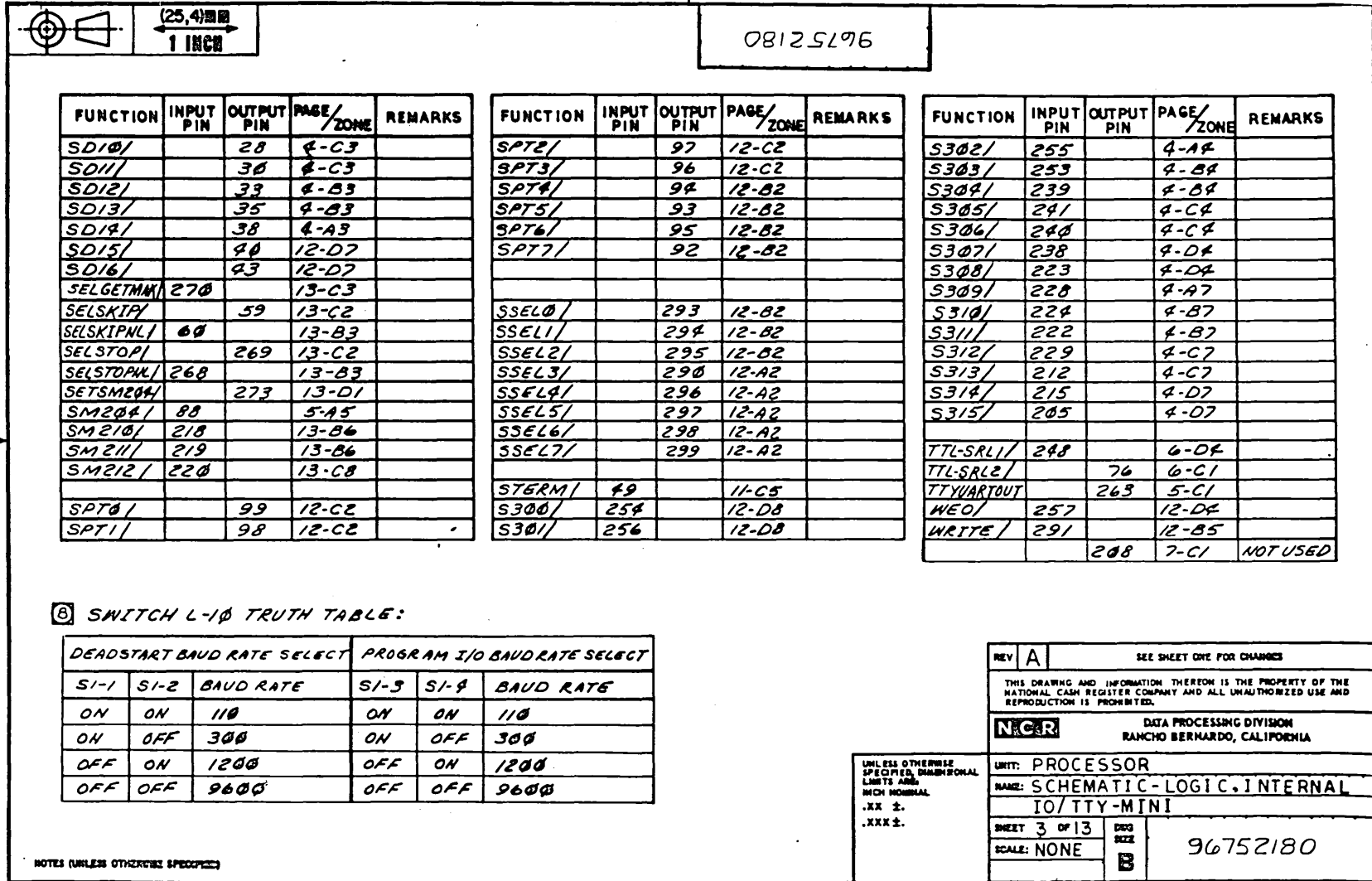


Figure I-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 4 of 14)

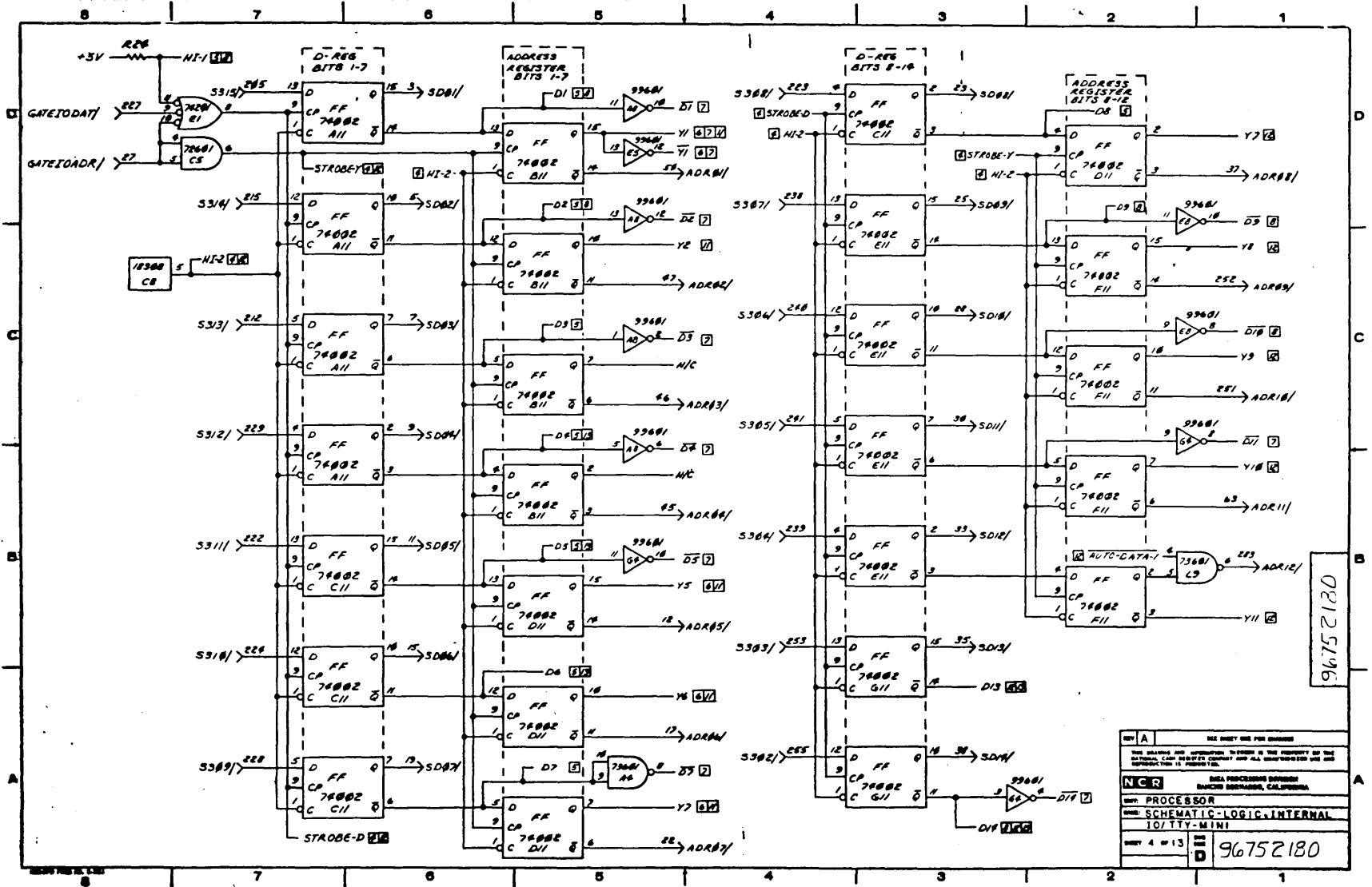


Figure 1-10. I/O-TTY Controller (PWA 88909701) Logic Diagram (Sheet 6 of 14)

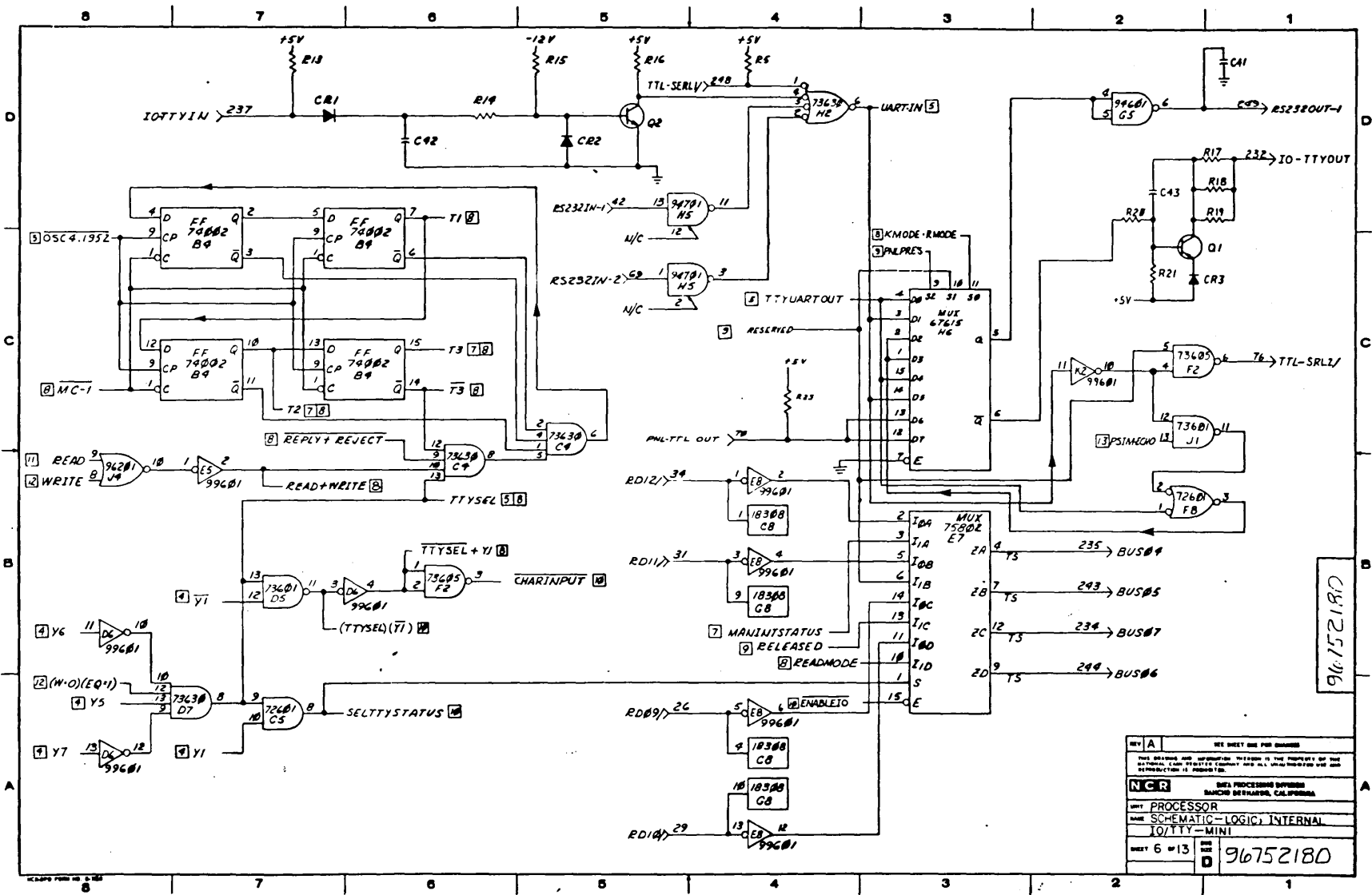


Figure 1-10. I/O-TTY Controller (PWA 88909701) Logic Diagram (Sheet 7 of 14)

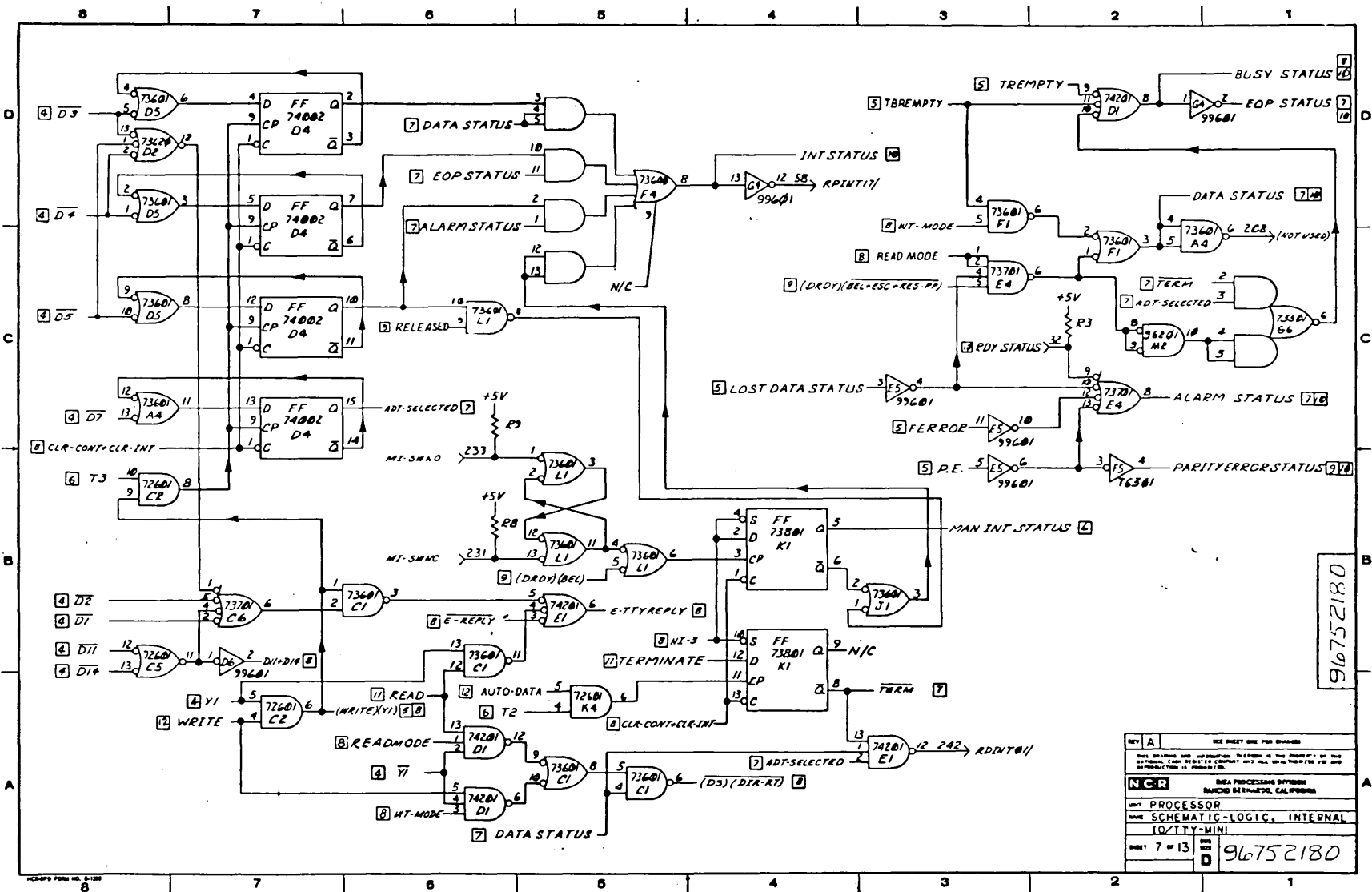


Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 8 of 14)

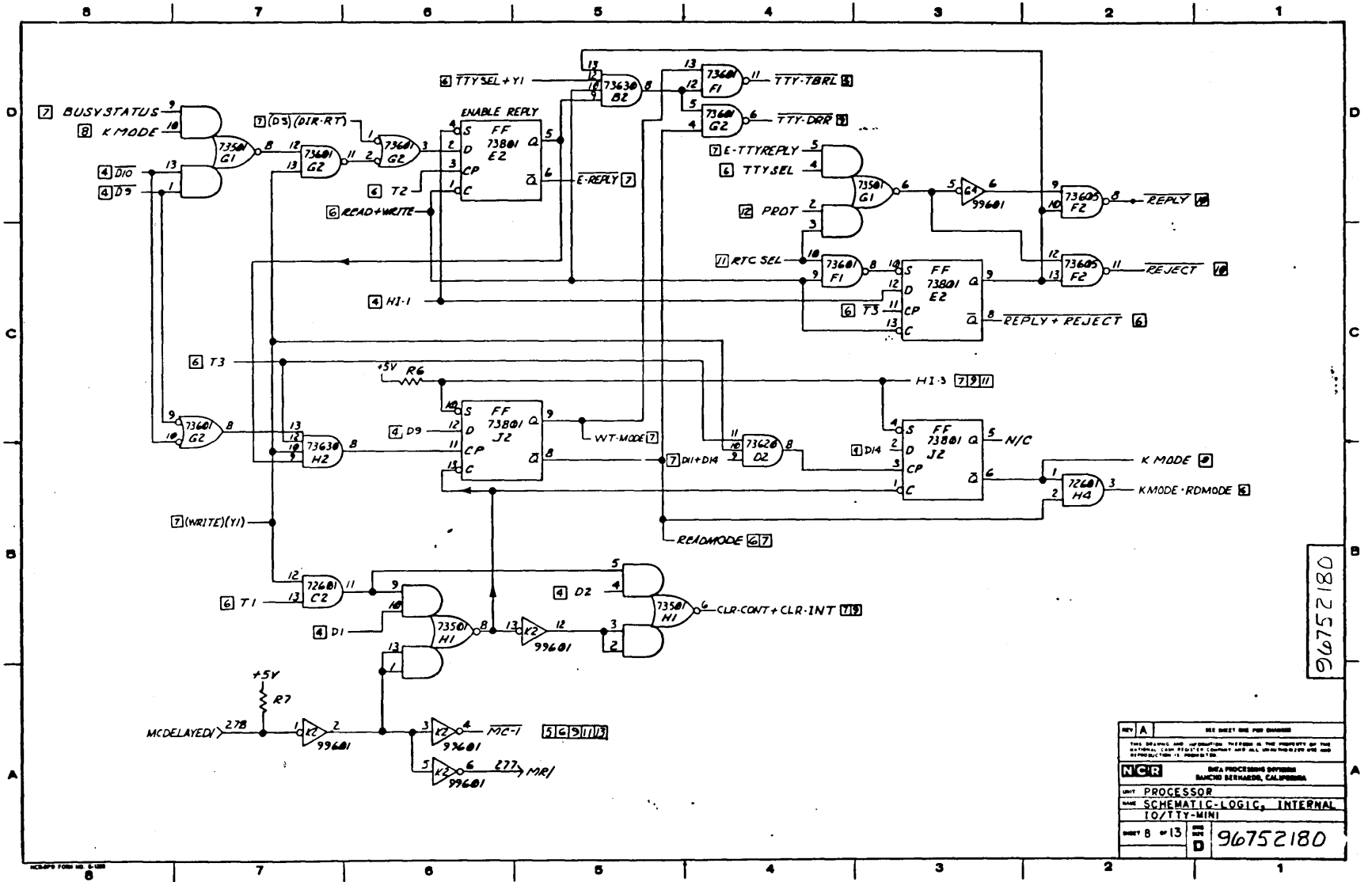


Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 10 of 14)

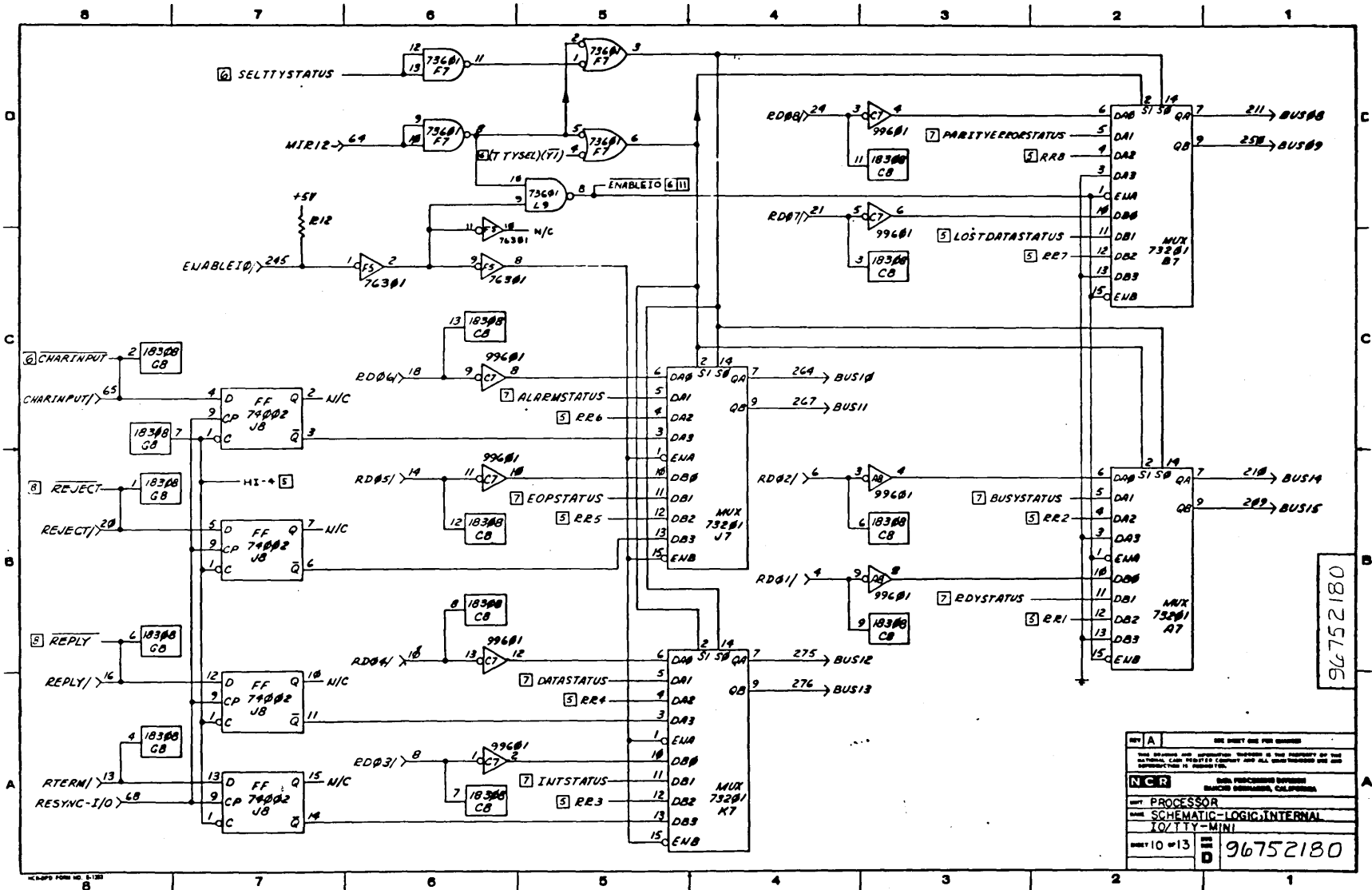
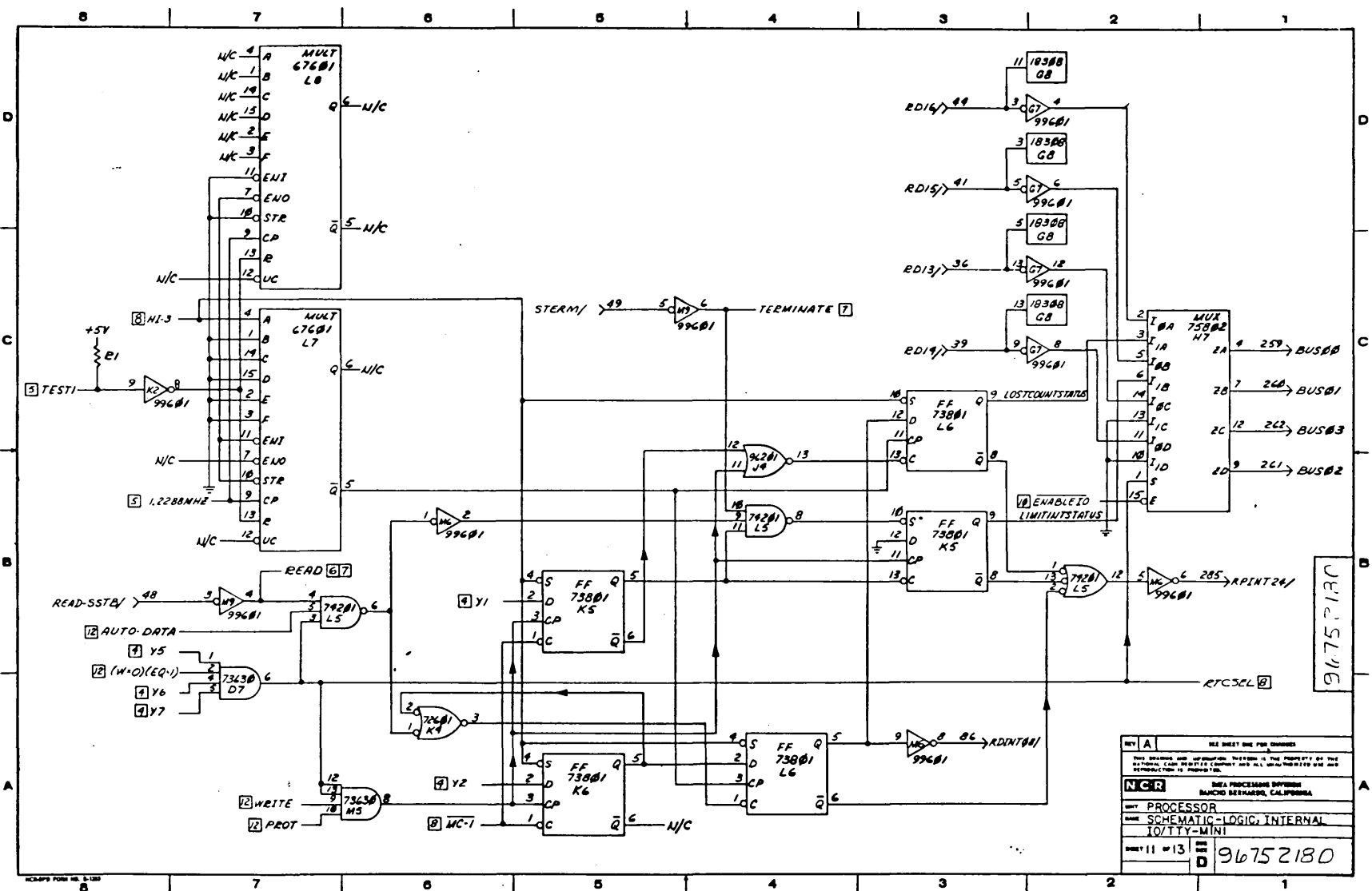


Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 11 of 14)



08499 FORM NO. 1-1973

08125L716

REV A USE SHIRT ONE FOR DIMENSIONS

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NCR DATA PROCESSING DIVISION SAN JOSE, CALIFORNIA

UNIT: PROCESSOR

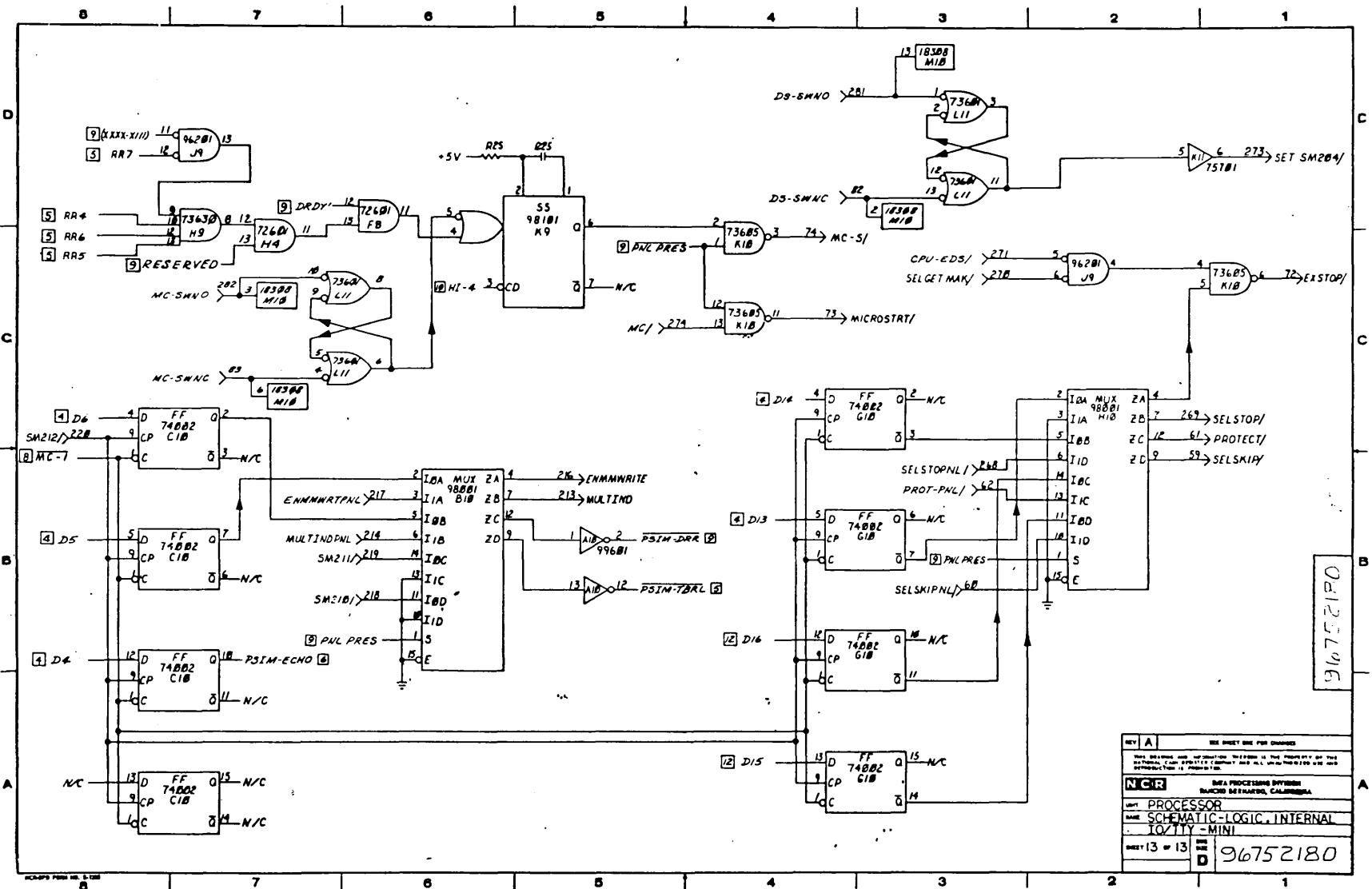
TYPE: SCHEMATIC - LOGIC, INTERNAL

IO/TTY-MINI

UNIT 12 = 13

96752180

Figure 1-10. I/O-TTY Controller (PMA 88909701) Logic Diagram (Sheet 13 of 14)



DWN		6-12-79		TITLE	LOGIC-INTERNAL IO/TTY-	PREFIX	DOCUMENT NO.	REV.		
CHKD	457Hua da	6-12-79		DATA SYSTEMS	MINI (B3)	DR	96752180	B		
ENG				LAYOLLA DIVISION	FIRST USED ON					
MFG				CODE IDENT	CYBER 18			SHEET 1 OF 1		
APPR				09132						
SHEET REVISION STATUS										
				REVISION RECORD						
				REV	ECD	DESCRIPTION	DRFT	DATE	CHG'D	APP'D
				A	DS 21059	CL. A. REL. BND	B.H.	10-15-79	J.S.	J.W.
				B	DS 21539	DELETED CODE LTR (BGYT)	J.V.W.	6-5-79	J.S.	ADV
				INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per KDC STD 1.01.024.						
NOTES										
				DETACHED LISTS						

Figure I-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 1 of 15)

REV	CHANGE	ER NO	DFTS	CHECK	APPD	DATE
A	RELEASED TO PRODUCTION	35-09546	—	—	—	—
FOR REVISIONS SEE (DR) DETACHED REVISIONS						
REVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CEC-60 1.61.001.						
		56744241				
		REF 315-0533596				
MO	RFC NO	PLANT LOC	DESCRIPTION	INTERPLANT USAGE (CODE)	REGO	NEXT ASSEMBLY
MANUFACTURING OPTION FOR USE ONLY AT PLANT SHOWN				REPLACES DWG		
THIS DRAWING AND ANY ATTACHMENTS THERETO AND INFORMATION THEREON ARE THE PROPERTY OF THE NATIONAL CASH REGISTER COMPANY AND ALL UNAUTHORIZED USE AND REPRODUCTION IS PROHIBITED.				NCR DATA PROCESSING DIVISION RANCHO BERNARDO, CALIFORNIA		
CLASS	MODEL	PLANT	CLASS	MODEL	PLANT	UNIT: PROCESSOR
MP17	-	35				LOGIC, INTERNAL
MP17	-	MP				10/TTY (7EMT)
DRAWING OF THE ASSEMBLY			CHKR	56744242		
SHEET NO	SEE	DESIGNER	OVERHOLT	315-0533595		
RLV		APPL	APPD	CODE	COVER SHEET SHEET 1 OF 18	

NOTES: (UNLESS OTHERWISE SPECIFIED)

- GROUND PINS: 53, 54, 79, 80, 101, 102, 225, 226, 236, 246, 301, 302.
- +5 VOLT PINS: 1, 2, 201, 202.
- 5 VOLT PINS: 100, 300.
- +12 VOLT PINS: 52.
- 12 VOLT PINS: 51.
- 6** FILTER CAPACITOR REF DESIGNATOR: C11, C12, C13, C14, C15, C16, C17, C18, C19, C21, C22, C23, C24, C25, C27, C30, C32, C33, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60.
- 7** FILTER CAPACITOR REF DESIGNATOR: C20 (+12V), C31 (-12V)
- HIGHEST REFERENCE DESIGNATOR USED: A10, B10, C60, CR3, D10, DE6, E10, F10, G10, H10, J10, K10, L10, M10, Q2, R12, SW1.
- REFERENCE DESIGNATORS NOT USED: A1, A2, B1, B4, C1, D6, DE1 THRU DE5, E6, J4, J5, L1, L2, L3, M1.

UNIT: PROCESSOR		56744242		C	REV
NAME LOGIC, INTERNAL		315-0533595		A	
10/TTY		NCR PROPRIETARY		SHEET 2 OF 18	

Figure 1-11. I/O-TTY Controller (PMA 96744241) Logic Diagram (Sheet 2 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
ADR01/		50	9-C5	
ADR02/		47	9-C5	(MOS)SMB7/
ADR03/		46	9-C5	(MOS)SMB8/
ADR04/		45	9-B5	(MOS)SMB9/
ADR05/		12	9-B5	(MOS)SPOS01/
ADR06/		17	9-A5	(MOS)SPOS02/
ADR07/		22	9-A5	(MOS)SPOS03/
ADR08/		37	9-D2	
ADR09/		252	9-C2	
ADR10/		251	9-C2	
ADR11/		63	9-B2	
ADR12/		283	9-B1	
ADR13/		67	17-D5	
ADR14/		66	17-C5	
ADR15/		265	17-C5	
ADR16/		266	17-C5	
AUTO-DATA/	286		17-B6	
BUS00		259	16-C1	
BUS01		260	16-C1	
BUS02		261	16-C1	
BUS03		262	16-C1	
BUS04		235	11-B2	
BUS05		243	11-A2	
BUS06		244	11-A2	
BUS07		234	11-A2	
BUS08		211	15-D1	
BUS09		250	15-C1	
BUS10		264	15-C4	
BUS11		267	15-B4	
BUS12		275	15-A4	
BUS13		276	15-A4	
BUS14		210	15-B1	
BUS15		209	15-B1	

NCR	UNIT: PROCESSOR	96744242 315-0533595	C	REV
	NAME: LOGIC, INTERNAL			★
	IO/TTY 7EMT			NCR PROPRIETARY SHEET 3 OF 18

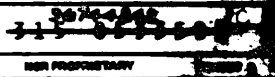
FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
CHARINPUT/		65	11-B4	RDIROUT
CPU-EDS/	271		18-C3	
CPU-PROT/	77		17-A5	
DS-SWNC	82		18-C6	
DS-SWNO	281		18-C8	
DSUARTCLK		206	10-C4	
ENABLEIO/	245		15-D8	
ENMMWRITE		216	18-A3	
ENMMWRTPNL	217		18-A5	
EXSTOP/		72	18-B1	
GATEIOADR/	27		9-C8	
GATEIODAT/	227		9-D8	
IO-TTYIN	237		11-D6	
IO-TTYOUT		232	11-C1	
MC/	274		18-C4	
MC-S/		74	18-D2	
MC-SWNC	83		18-D8	
MC-SWNO	282		18-D8	
MCDELAYED/	278		13-A7	
MICROSTRT/		73	18-D2	
MIR12-	64		15-D8	
MI-SWNC	231		12-B5	
MI-SWNO	233		12-B6	
MR/		277	13-A4	

NCR	UNIT: PROCESSOR	96744242 315-0533595	C	REV
	NAME: LOGIC, INTERNAL			★
	IO/TTY 7EMT			NCR PROPRIETARY SHEET 4 OF 18

NCR - DFD 8-1463

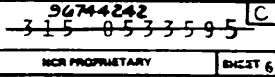
Figure 1-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 3 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
MULTIND		213	18-A3	
MULTINDPNL	214		18-A5	
OSC4.9152	230		10-C8	
PNL-BAUD0		90	10-A4	
PNL-BAUD1		91	10-A4	
PNL-TTLOUT	70		11-B4	
PNLPRES/	84		14-B6, 18-D4	
PROG-PROT/		292	17-A3	
PROT-PNL/	62		18-B5	
PROTECT/		61	18-B3	
RDINT01/		242	12-C1	TTY-ADT-INT/
RDINT08		86	16-A3	DATAINT8
RDINT08/		85	14-C1	PNLKEYINT/
RDINT13/		272	14-B1	PNLTBRINT
RDYSTATUS	32		12-C2, 15-B2	NOT USED
RD01/	4		15-B4	
RD02/	6		15-B4	
RD03/	8		15-A7	
RD04/	10		15-A7	
RD05/	14		15-B7	
RD06/	18		15-C6	
RD07/	21		15-C4	
RD08/	24		15-C4	
RD09/	26		11-A6	
RD10/	29		11-A6	
RD11/	31		11-A6	
RD12/	34		11-B6	
RD13/	36		16-C3	

NCR	UNIT: PROCESSOR	
	NAME: LOGIC, INTERNAL	
	10/TTY 7EMT	
NCR PROPRIETARY		

NCR-DPD E-1463

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
RD14/	39		16-C3	
RD15/	41		16-C3	
RD16/	44		16-B3	
READ-SSTB/	48		16-B3	(MOS)SSTB/
REACT/	20		13-D2, 15-B8	(MOS)RPOS03/
REPLY/	16		13-D2, 15-B8	(MOS)RPOS02/
RESYNC-I/O	68		15-B8	
RPINT17/		58	12-A2	
RPINT24/		285	16-B1	PROGINT/
RS232IN-1	42		11-D4	
RS232IN-2	69		11-C4	
RS232OUT-1		249	11-C1	
RS232OUT-2		247	10-D1	
RTERM/	13		15-B8	
SD01/		3	9-D7	
SD02/		5	9-C7	
SD03/		7	9-C7	
SD04/		9	9-B7	
SD05/		11	9-B7	
SD06/		15	9-B7	
SD07/		19	9-A7	
SD08/		23	9-D3	
SD09/		25	9-C3	
SD10/		28	9-C3	
SD11/		30	9-C3	
SD12/		33	9-B3	
SD13/		35	9-B3	
SD14/		38	9-B3	
SD15/		40	17-D7	
SD16/		43	17-D7	

NCR	UNIT: PROCESSOR		C	REV
	NAME: LOGIC, INTERNAL			
	10/TTY 7EMT			
NCR PROPRIETARY		BEST 6 OF 18		

NCR-DPD E-1463

Figure I-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 4 of 15)

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
SELGETMAK/	270		18-C3	
SELSKIP/		59	18-B3	
SELSKIPNL/	60		18-B5	
SELSTOP/		269	18-B3	
SELSTOPNL/	268		18-B5	
SETSM204/		273	18-C3	
SM204/	88		10-B5, 14-D6	
SM210/	218		18-A5	
SM211/	219		18-A5	
SM212/	220		18-C8	
SPT0/		99	17-C1	
SPT1/		98	17-C1	
SPT2/		97	17-C1	
SPT3/		96	17-C1	
SPT4/		94	17-C1	
SPT5/		93	17-C1	
SPT6/		95	17-C1	
SPT7/		92	17-C1	
SSEL0/		293	17-B1	
SSEL1/		294	17-B1	
SSEL2/		295	17-B1	
SSEL3/		290	17-B1	
SSEL4/		296	17-B1	
SSEL5/		297	17-B1	
SSEL6/		298	17-B1	
SSEL7/		299	17-A1	
STERM/	49		16-B8	
S300/	254		17-D8	
S301/	256		17-D8	
S302/	255		9-B4	
S303/	253		9-B4	
S304/	239		9-B4	

NCR	UNIT: PROCESSOR	36744242	C	REV
	NAME: LOGIC, INTERNAL			
	10/TTY TERT			
NCR-DPD 8-1483				

FUNCTION	INPUT PIN	OUTPUT PIN	PAGE-ZONE	REMARKS
S305/	241		9-C4	
S306/	240		9-C4	
S307/	238		9-C4	
S308/	223		9-D4	
S309/	228		9-A8	
S310/	224		9-B8	
S311/	222		9-B8	
S312/	229		9-B8	
S313/	212		9-C8	
S314/	215		9-C8	
S315/	205		9-D8	
TTL-SERL1	248		11-D4	
TTL-SRL2		76	11-D1	
TTYUARTOUT		263	10-C1	
WEO/	257		17-D3	
WRITE/	291		17-B5	
		208	12-D1	NOT USED

NCR	UNIT: PROCESSOR	36744242	C	REV
	NAME: LOGIC, INTERNAL			
	10/TTY TERT			
NCR-DPD 8-1483				

8 7 6 5 4 3 2 1

15MICR

5V
R1K
18308 3
3.8
WI-1 214
2
74261 D3
12
GATE20DAT/ 227 13
1
5
GATE20ADR/ 27 5

STROBE-D 317
STROBE-Y 17

5315/ 225
5314/ 215
5313/ 212
5312/ 229
5311/ 222
5310/ 224
5309/ 226

1
99401 AB
4
D01 11
1
99401 A3
8
Y01 11114
12
ADR01/

1
99401 A0
2
D02 11
12
Y02 114
11
ADR02/

1
99401 A0
12
Y03 11
N/C
ADR03/

1
99401 AB
6
D04 11
N/C
ADR04/

1
99401 CB
4
D05 11
Y05 11114
12
ADR05/

1
99401 CB
17
D06 11114
11
ADR06/

1
99401 CB
2
D07 11
Y07 11114
22
ADR07/

1
99401 CB
12
Y08 11
37
ADR08/

1
99401 M4
12
D09 11
12
ADR09/

1
99401 M4
15
Y10 11
14
ADR10/

1
99401 CB
16
D11 11
Y11 11
ADR11/

1
99401 CB
7
Y12 11
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734H L'6
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ADR12/

5308/ 223
5307/ 238
5306/ 246
5305/ 241
5304/ 237
5303/ 253
5302/ 253

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99401 CB
12
D10 11
5
SD08/

1
99401 CB
14
D09/

1
99401 CB
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SD10/

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99401 CB
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SD11/

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99401 CB
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SD12/

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99401 CB
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SD13/

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99401 CB
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SD14/

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99401 D4
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D14 11114

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D14 11114

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Figure 1-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 9 of 15)

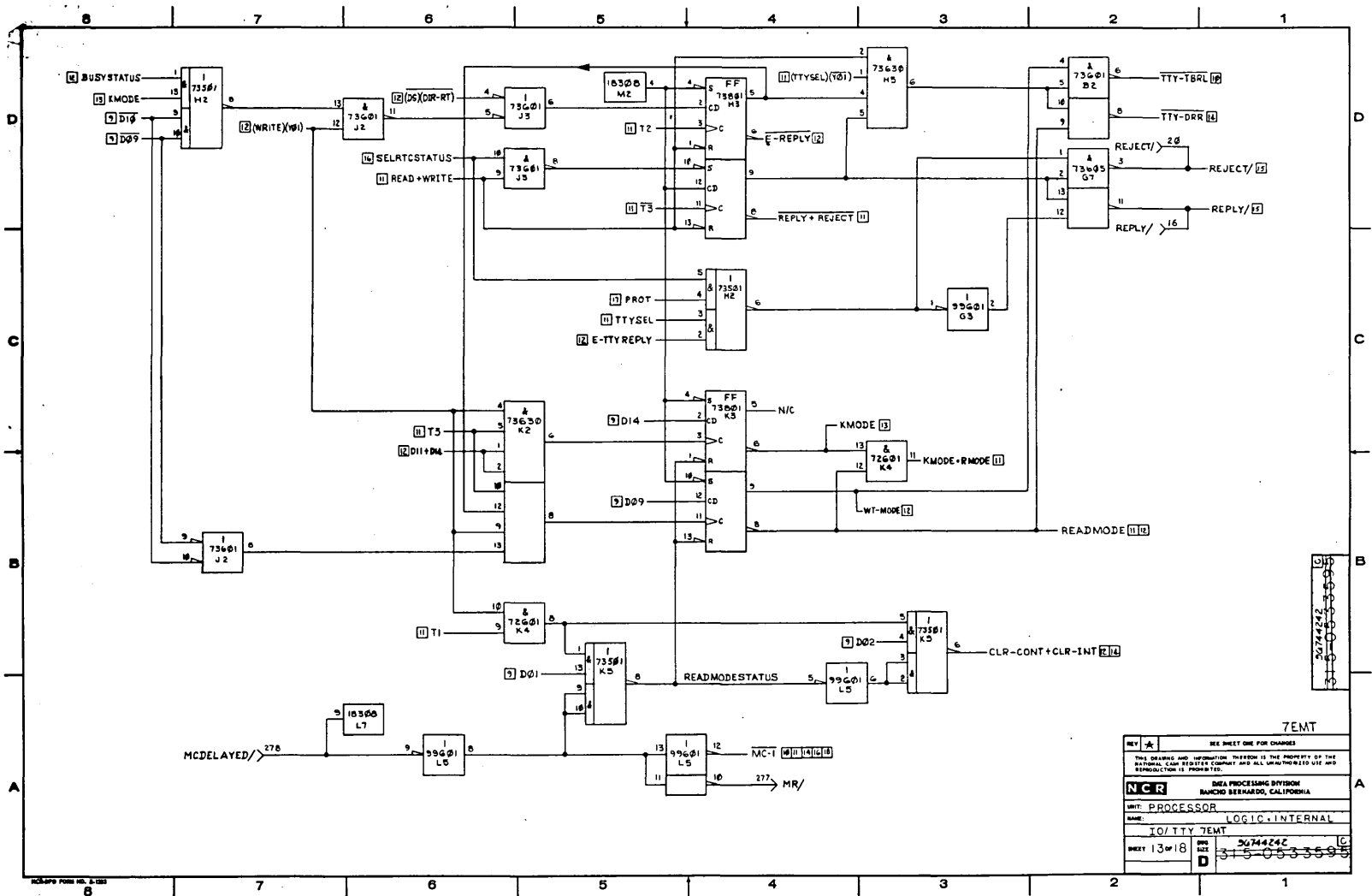


Figure 1-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 10 of 15)

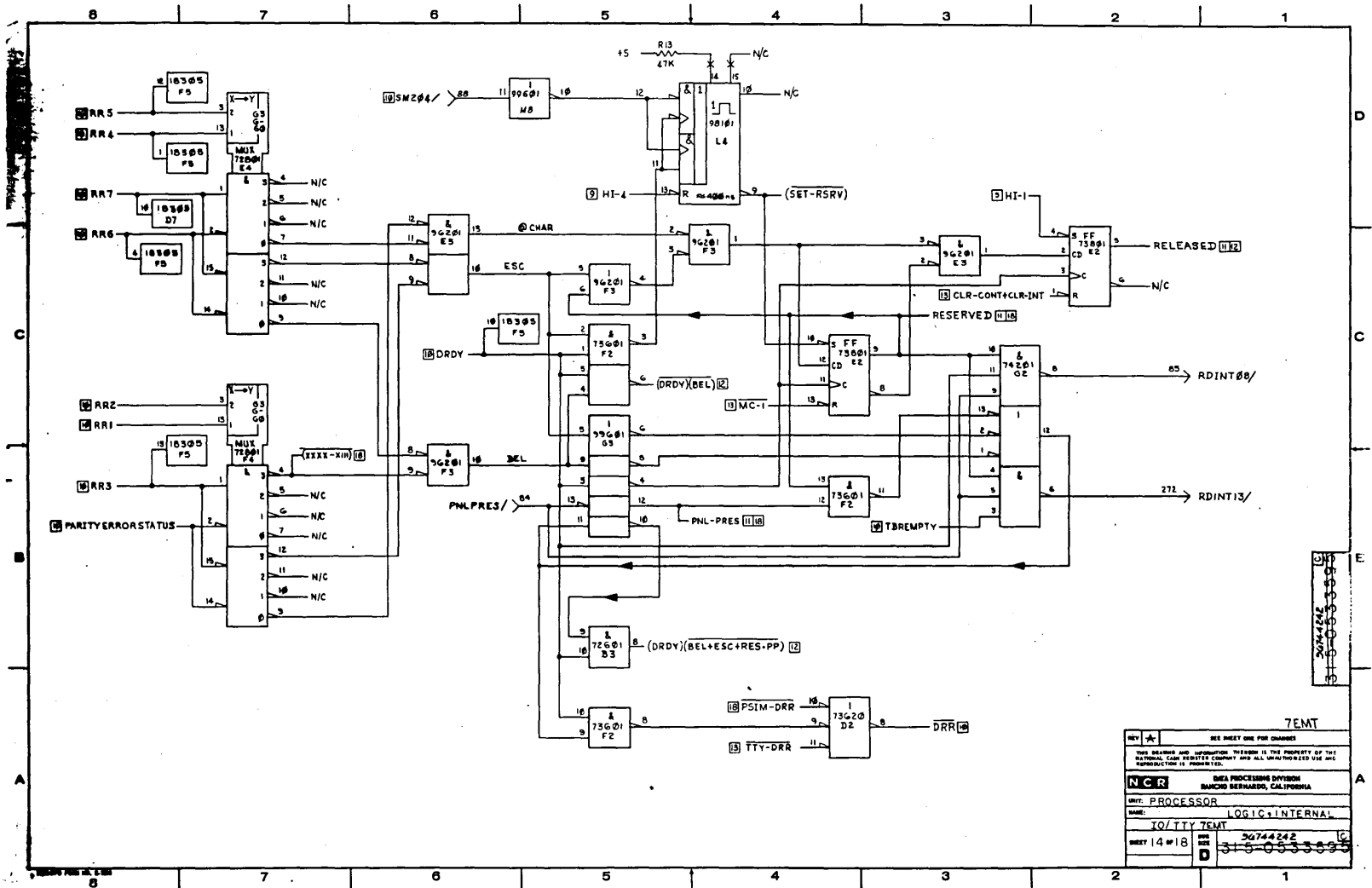


Figure 1-11. I/O-ITV Controller (PWA 96744241) Logic Diagram (Sheet 12 of 15)

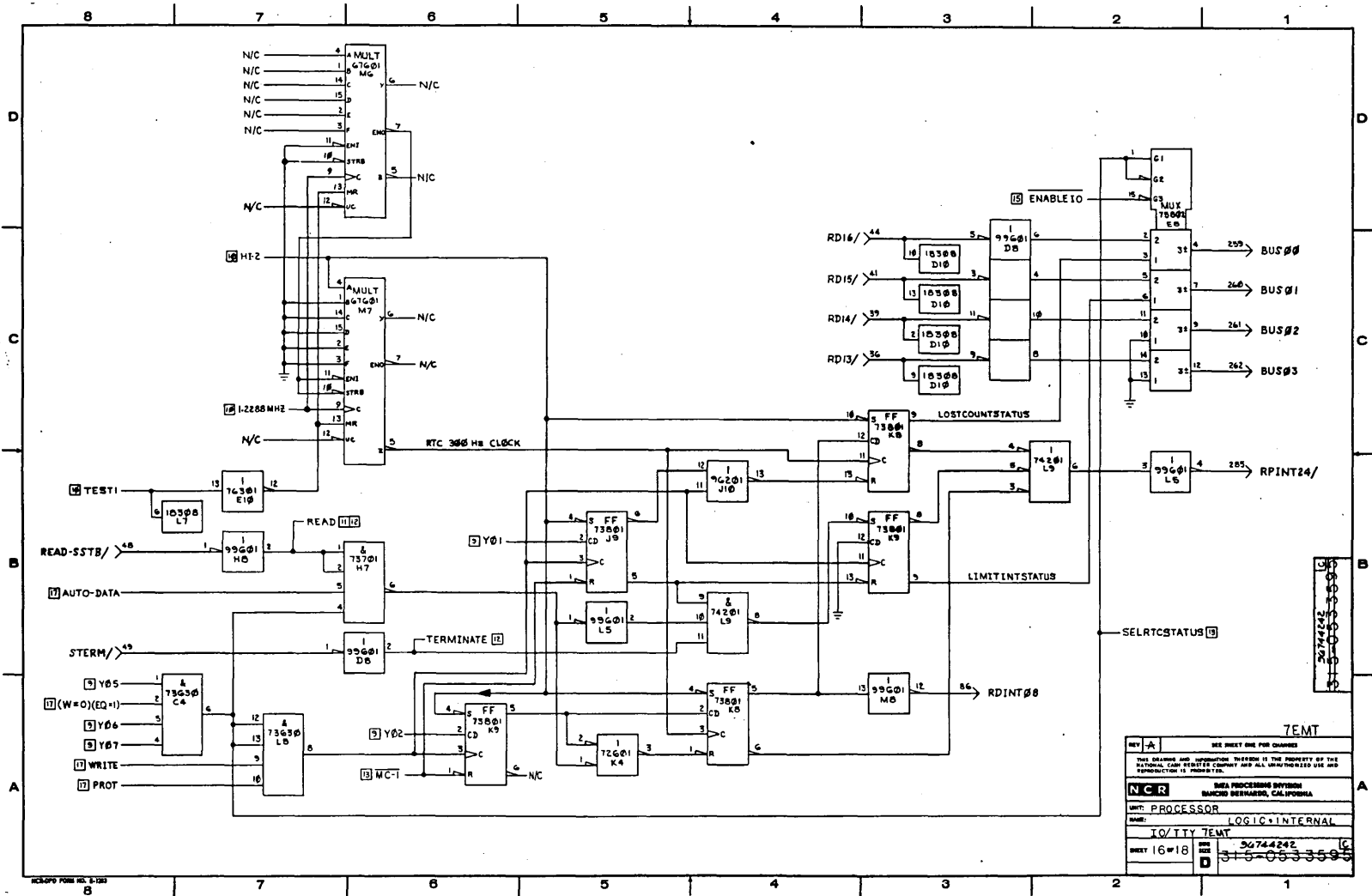
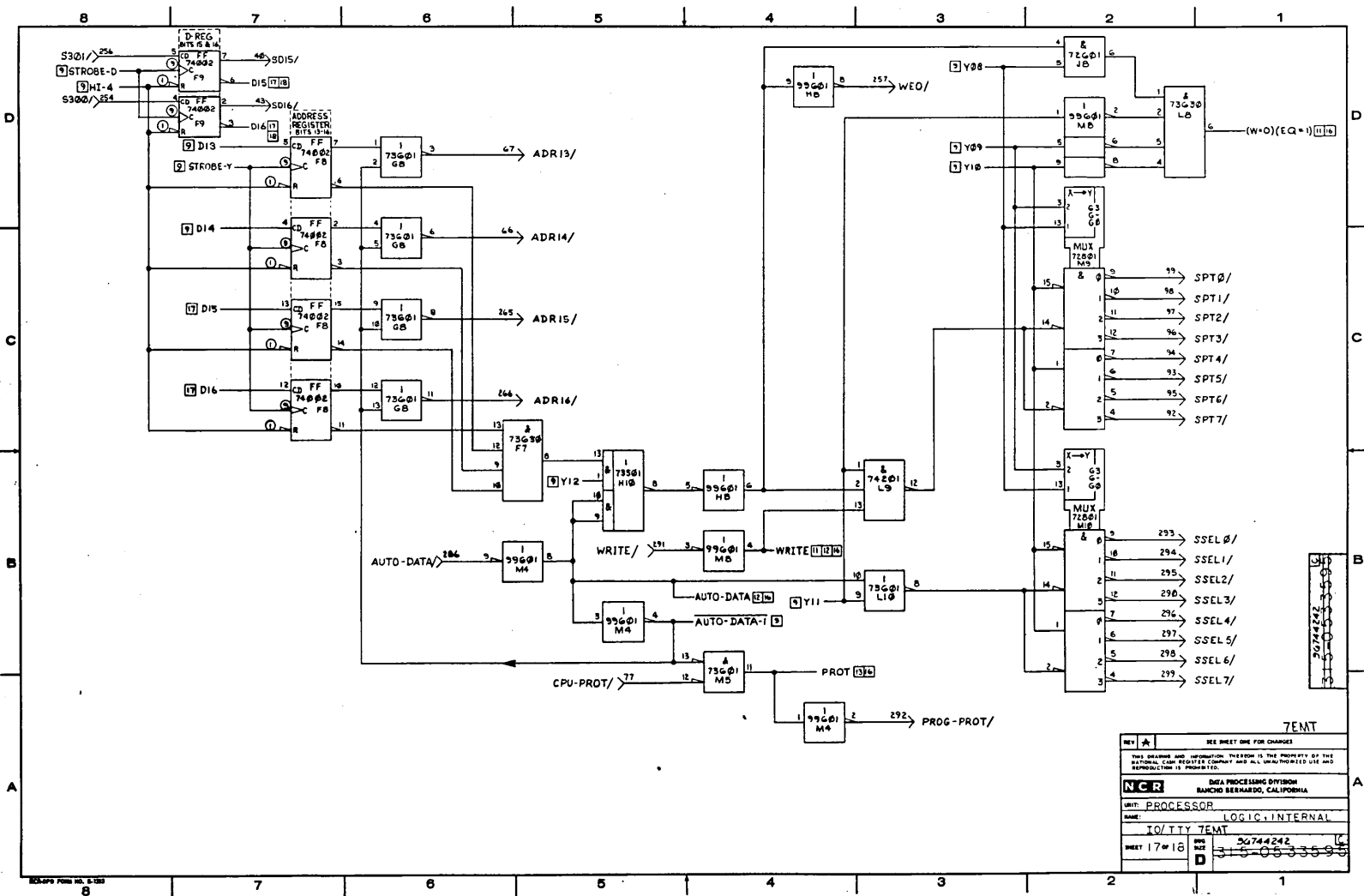


Figure 1-11. I/O-TTY Controller (PWA 96744241) Logic Diagram (Sheet 13 of 15)



[illegible]

DWN	70KAY	5-7-76	CONTROL DATA SMALL COMPUTER DEVELOPMENT DIVISION CODE IDENT 09132	TITLE	LOGIC DIAGRAM - INTERNAL I/O TTY (7EMT)		PREFIX	DR	DOCUMENT NO	96744242	REV	C
CHKD	Jerry Briden	6-2-76		FIRST USED ON	MP 17				SHEET		1 OF 1	
ENG	6-1-76	6-2-76										
MFG	6-1-76	6-2-76										
APPR	6-1-76	6-2-76										
SHEET REVISION STATUS				REVISION RECORD								
				REV	ECO	DESCRIPTION	DRFT	DATE	APP			
				A	18403	CL. A. RELEASED	JM	6-7-76	E. G.			
				B	14704	SHT 11, R3 WAS 2.7K	TC	11-11-76	E. G.			
				C	DS21235	SEE ECO	JSH	7-14-78	AW			
				INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.								
NOTES												
				DETACHED LISTS								

PWA PARTS DATA

2



REVISION RECORD							
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP	
A	0521395	CL A. RELEASED	ED	6-6-79			AW
B	0521664	REVISION UPDATE ONLY	TVH	7/6-79			AW

CAUTION:

THIS PWA CONTAINS ELECTROSTATIC SENSITIVE DEVICES WHICH MAY BE PERMANENTLY DAMAGED BY IMPROPER HANDLING. OBSERVE HANDLING PROCEDURES OUTLINED IN CDC STD 1.60.010 & CDC ENGR SPEC 16013100 WHEN ASSEMBLING, INSTALLING, REMOVING, OR TRANSPORTING THIS PWA.

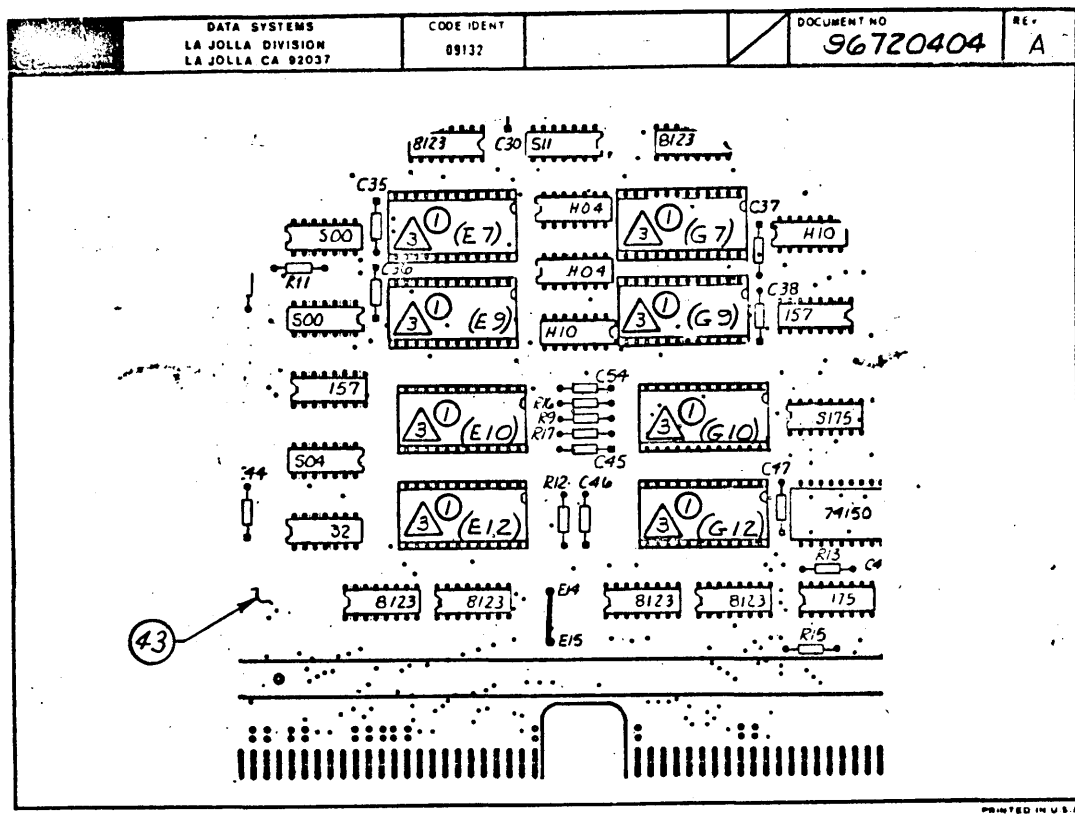
INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.	DWN	B. Roberts	11-6-78	TITLE PW ASSY - 1700 TRANSFORM W/BCD (8KFT)			
	CHKD	L. Rye	6-5-79				
	ENG	D. Smith	6-7-79				
	MFG	D. Smith	11-27-78				
	APP	L. Rye	6-6-79				
				DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 09132	A	DWG No 96720404

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 09132		DOCUMENT NO 96720404	REV A
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1. MARK PART NO. PER CDC SPEC 88818000.
2. WHEN PWA IS SOLD AS A SPARE, FPP 96720407 MUST ACCOMPANY PWA.
3. 3 INSTALL (F/N 1) "ROM SET" PER TABLE BELOW. INSURE IC PIN 1 MATCHES SOCKET PIN 1.

ROM SET	
PART NO.	IC LOCATION
96752663	E9
96752664	G9
96752665	E12
96752666	G12
96752667	E7
96752668	G7
96752669	E10
96752670	G10

Figure 2-1. 1700 Transform PWA (96720404) (Sheet 1 of 6)



CD CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

96720404	B	CLA	A	PWA-1700 XFORM W/BCD BKFT	DSM	CBR 18	05/30/79	06/27/79	
ASSEMBLY NUMBER	REV	CLASS	SW AT	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	WH	N
2	D	96720405	100	PC	PW SURASSY-1700 XFORM W/BCD	IN			AYM4	N	N
3	C	96720406	REF	PC	LOGIC DIAG-1700 XFORM W/BCD	IN			RFE4	N	N
1	A	96752662	100	PC	ROM SET VERSION E2 EMULATOR	IN			AYM4	N	N
					NUMBER OF LINE ITEMS = 3						
					HIGHEST FIND NUMBER = 3						

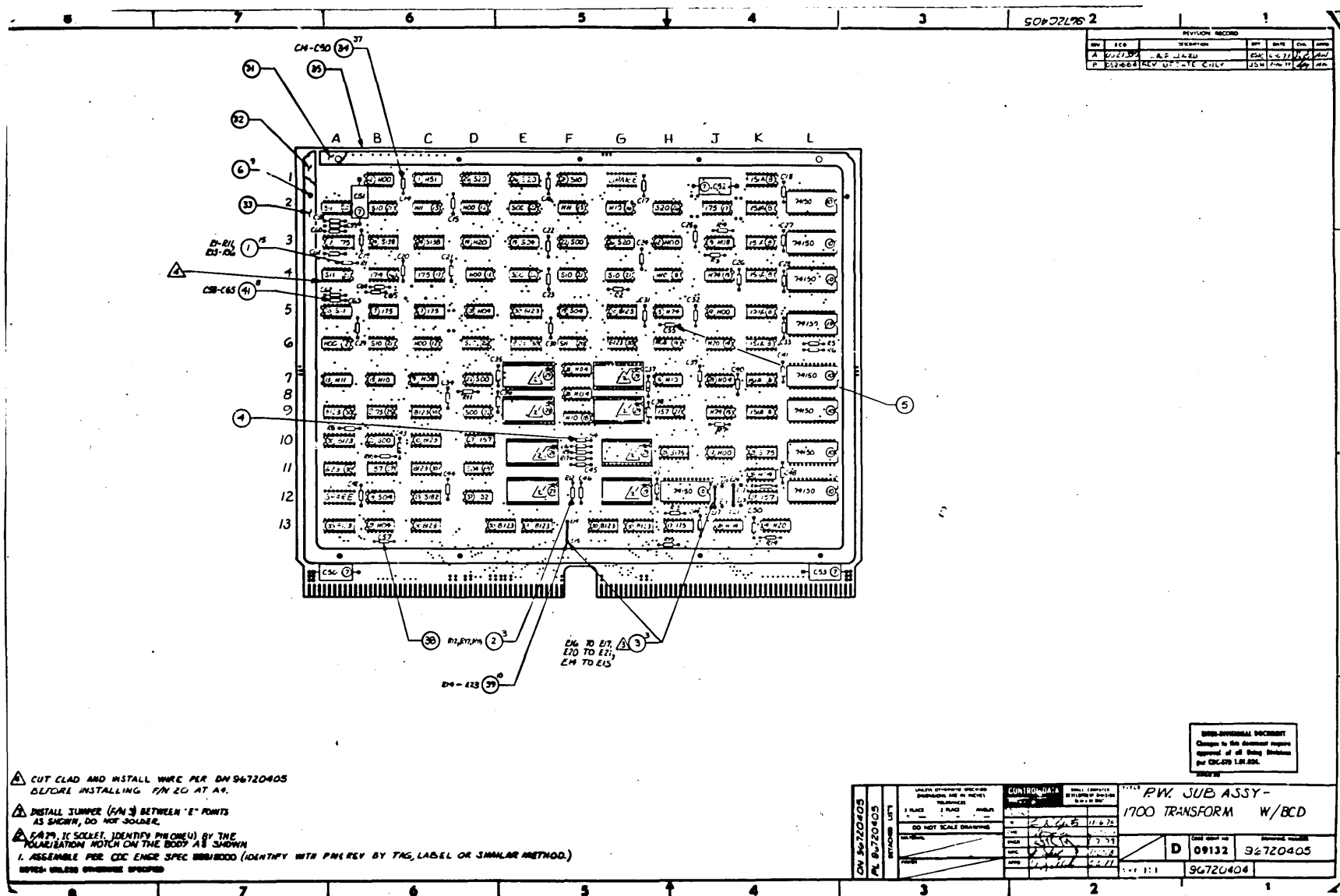
AA 8700-1 REV 7-78

SCMD

INTERDIVISIONAL DOCUMENT

Figure 2-1. 1700 Transform PWA (96720404) (Sheet 2 of 6)

Figure 2-1. 1700 Transform PMA (96720404) (Sheet 3 of 6)



[illegible]

CONTROL DATA
CORPORATION

ASSEMBLY PARTS LIST

GD CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S SPARE PARTS
N NON SPARE PARTS

96720405	H	CLA	D	2W SUHASSY-1700 XFORM W/BCD	USM	C4R 1A	05/30/79	06/27/79	
ASSEMBLY NUMBER	REV	CLASS	DB	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

P/NO	QTY	PART NUMBER	QUANTITY	UNIT LEAD	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	WAREHOUSE PART NUMBER	PN	NC
1	C	24500063	1500	PC	KES FXD .25W 1000 OHMS	IN			PPP4	N	
2	C	24500087	300	PC	KES FXD .25W 10000 OHMS	IN			PPP4	N	
42	C	52629949	1600	IN	WIPE ELEC 30 GA WHITE	IN	039382		PPD1	N	
41	A	84996715	800	PC	CAP.CFR 100V 151 PF	IN			PPP4	N	
4	A	84996717	100	PC	CAP.CF4 100V 220 PF	IN			PPP4	N	
5	A	84996719	100	PC	CAP.CFR 100V 330 PF	IN			PPP4	N	
38	A	84996725	100	PC	CAP.CER 100V 680 PF	IN			PPP4	N	
6	A	88812400	900	PC	RIVET-SEMI-TUBULAR,HRS .312 LG	IN			PPP4	N	
7	A	88805400	400	PC	CAP ELECT-ALUM 16VDC 100UF	IN			PPP4	N	
8	A	888A1100	800	PC	IC 74151A TTL DATA SEL MUX	IN			PPP4	N	
9	A	888A1200	300	PC	IC 74H06 TTL QUAD 2-INPUT AND	IN			PPP4	N	
10	A	888A1300	900	PC	IC 74150 TTL 16-BIT SEL/MUX	IN			PPP4	N	
11	A	888A2000	100	PC	IC 74H51 TTL DUAL 2-WIDE 2-INP	IN			PPP4	N	
12	A	888A2100	800	PC	IC 74H00 TTL QUAD 2-I POS NAND	IN			PPP4	N	
13	A	888A2300	300	PC	IC 74H11 TTL TRIPLE 3-INP AND	IN			PPP4	N	
14	A	888A2600	300	PC	IC 74H20 TTL DUAL 4-I POS NAND	IN			PPP4	N	
15	A	888A2700	300	PC	IC 74H74 TTL DUAL D EDGE F/F	IN			PPP4	N	
16	A	888A2800	100	PC	IC 74174 TTL HEX D F/F W/CLEAR	IN			PPP4	N	
17	A	888P2900	600	PC	IC 74175 TTL QUAD D F/F WCLR	IN			PPP4	N	
18	A	888B3100	500	PC	IC 74H10 TTL TPL 3-I POS NAND	IN			PPP4	N	
19	A	888P3700	400	PC	IC 74S04 SCHOTTKY TTL HEX INV	IN			PPP4	N	
20	A	888A4100	400	PC	IC 74S11 SCHOTTKY TTL TPL 3-I	IN			PPP4	N	
21	A	888A4200	500	PC	IC 74S10 SCHOTTKY TTL 3-I NAND	IN			PPP4	N	
22	A	888A4500	600	PC	IC 74S00 SCHOTTKY TTL QUAD 2-I	IN			PPP4	N	
23	A	888H5000	100	PC	IC 74S162 TTL LOOK-AHEAD GEN	IN			PPP4	N	
24	A	888A5100	200	PC	IC 74S13A TTL DECODER/MUX	IN			PPP4	N	
25	A	888A5200	500	PC	IC 74S175 TTL QUAD D F/F W/CLEAR	IN			PPP4	N	
26	A	888A5300	300	PC	IC 74S20 SCHOTTKY TTL DUAL 4-I	IN			PPP4	N	
27	A	888A6400	400	PC	IC 74157 TTL QUAD 2-INPUT MUX	IN			PPP4	N	
28	A	888H6600	700	PC	IC 74H04 TTL HEX INVERTER	IN			PPP4	N	
29	A	888A9102	600	PC	SOCKET-IC 24 PIN,LOW PROFILE	IN			PPP4	N	
39	A	888A9200	1000	PC	SOCKET-SPR,MNTN .017-.019 PIN	IN			PPP4	N	
30	A	888A9600	1600	PC	IC 4123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N	
31	C	888B6600	100	PC	INSULATOR-CARD FRAME,UPPER	IN			PPP4	N	
32	C	888B6700	100	PC	INSULATOR-CARD FRAME,LOWER	IN			PPP4	N	
33	C	888B6800	100	PC	FRAME-CARD (CASTING)	IN			PPP4	N	

PROJECT ENGINEER

SCMD

INTERDIVISIONAL DOCUMENT

Figure 2-1. 1700 Transform PWA (96720404) (Sheet 4 of 6)

ASSEMBLY PARTS LIST

SPARE CODE	
S	SPARE PARTS
N	NON SPARE PARTS

96720405	R	CLA	D	PW SURASSY-1700 XFORM W/HCD	DSM	CAH 18	05/30/79	06/27/79	
ASSEMBLY NUMBER	REV	CLASS	OW	ASSEMBLY DESCRIPTION	DESIGN NO-REV	FIRST ISSUE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	OW	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN STOCK STATUS	CHANGE NO.	DATE EFFECTIVE	MAKE/BUY PART TYPE	OW	REV
34	A		88897800	3700	PC	CAP-FIXED SOLID TANT.6VDC.12UF	IN			PPP4	N	
3	A		88945400	300	PC	JUMPER 24AWG TEF INSULATED .50	IN			PPP4	N	
35	D		96735600	100	PC	PWB-1700 XFORM W/HCD	IN			PPP4	N	
37	A		96744172	100	PC	IC 7432 TTL QUAD 2-IN OM GATE	IN			PPP4	N	

NUMBER OF LINE ITEMS = 40
HIGHEST FIND NUMBER = 42

AA 2709-1 REV 7-78 PROJECT ENGINEER SCMD INTERDIVISIONAL DOCUMENT

17.

DWN	B. Roberts	11-8-78	CONTROL DATA CORPORATION	TITLE	P.W. SUB ASSY-1700 TRANSFORM W/HCD	PREFIX	DN	DOCUMENT NO	96720405	REV	B
CHKD	A. J. J.	6-5-79	DATA SYSTEMS	FIRST USED ON							
ENG	E. J. J.	6-7-79	LAJOLLA DIVISION								
MFG	E. J. J.	11-27-79	CODE IDENT								
APPR	E. J. J.	6-6-79	09132								

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP										
A	DS 21395	1. A. RELEASED	AS BR	6-6-79	AN										

INTER-DIVISIONAL DOCUMENT
Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

NOTES: AAB030

Figure 2-1. 1700 Transform PWA (96720404) (Sheet 5 of 6)

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO.	REV
		DN 96720405	A

A CUT CLAD AT THE FOLLOWING LOCATIONS:

1. A4-9 & A4-10
2. J4-3

B ADD WIRE FN42 AS FOLLOWS:

1. A4-10 TO J3-13
2. J4-3 TO FEED THRU "A".

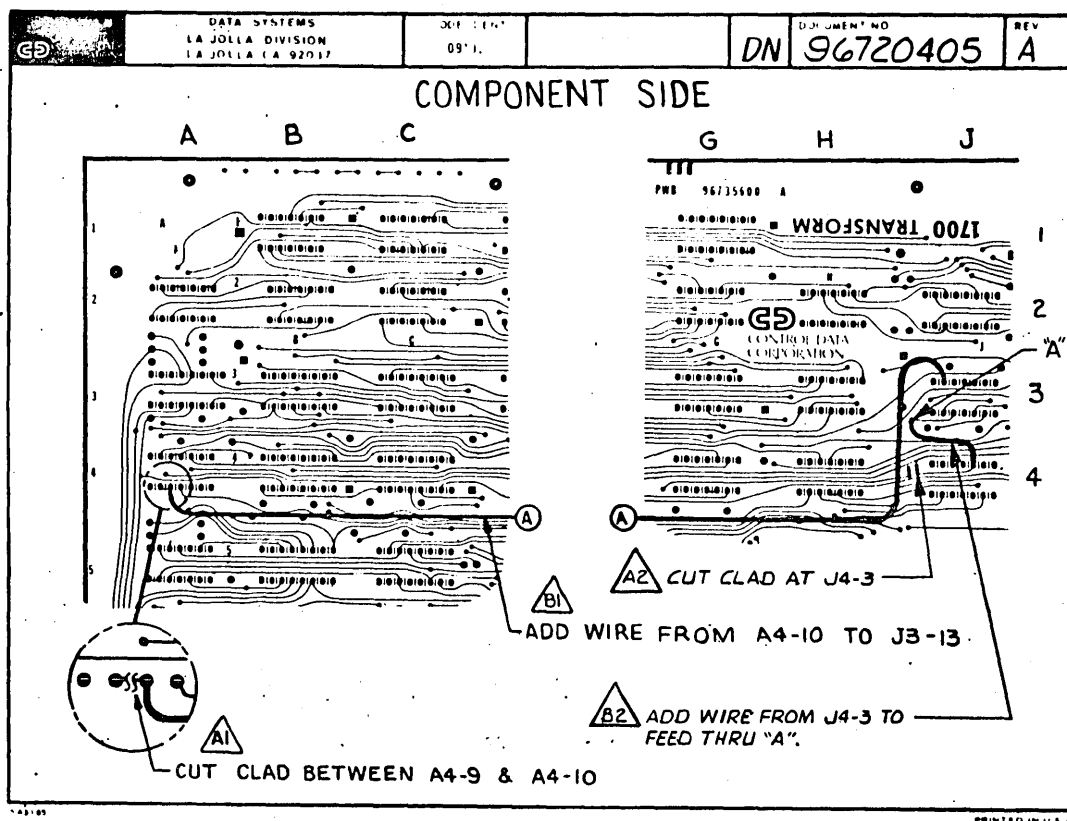


Figure 2-1. 1700 Transform PWA (96720404) (Sheet 6 of 6)

REVISION RECORD							
REV	ECO	DESCRIPTION	DFT	DATE	CHKD	APP	
B	DS21393	REVISED & REDRAWN	BY	3-1-79	AW		
C	DS21395	INACTIVE	BY	6-6-79	AW		
D	DS21664	REVISION UPDATE ONLY	TYT	7-16-79	AW		

- INACTIVE -
 REPLACED BY 96720404
 BR- 5-31-79

CAUTION:

THIS PWA CONTAINS ELECTROSTATIC
 SENSITIVE DEVICES WHICH MAY BE
 PERMANENTLY DAMAGED BY IMPROPER
 HANDLING. OBSERVE HANDLING PROCEDURES
 OUTLINED IN CDC STD 1.60.010 & CDC ENGR
 SPEC 16013100 WHEN ASSEMBLING, INSTALLING,
 REMOVING OR TRANSPORTING THIS PWA.

INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.		DWN CHKD ENG MFG APP	4-9-78 5-15-78 5-15-78 5-20-78 5-28-78	TITLE PW ASSY - 1700 TRANSFORM W/BCD (BJCT)	DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 09132	DWN NO 96837727
--	--	----------------------------------	--	--	---	---------------------	--------------------

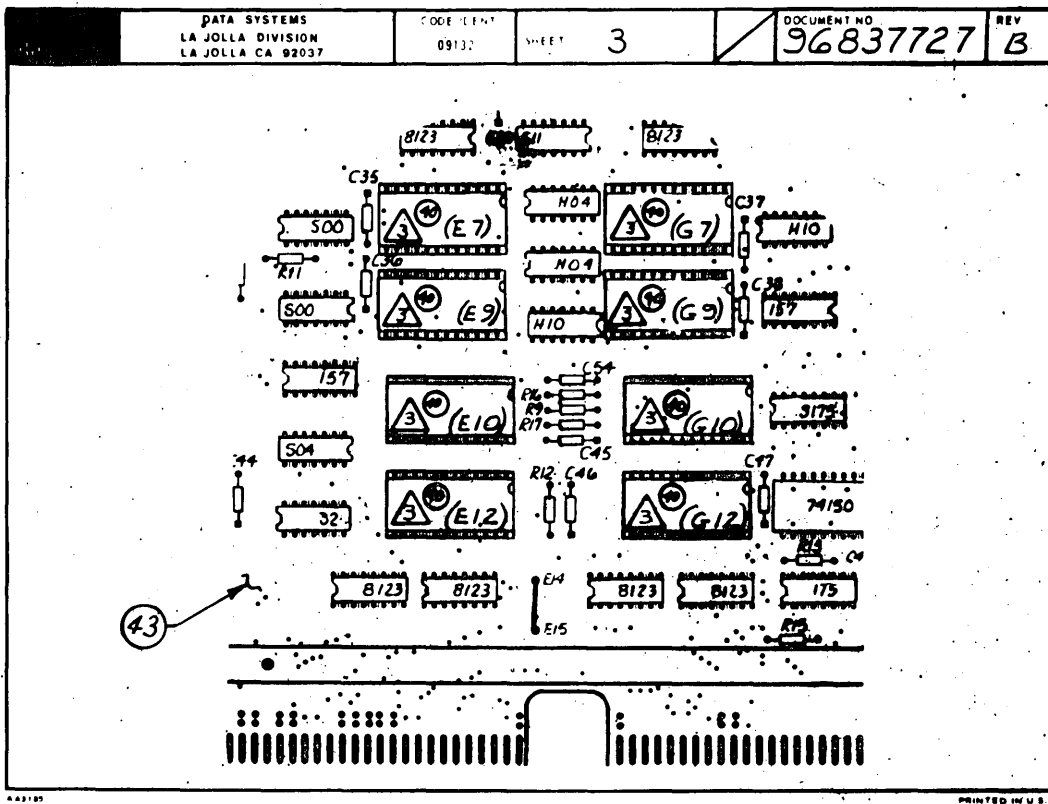
DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 09132	DOCUMENT NO 96837727	REV B
---	---------------------	-------------------------	----------

1. MARK PART NO. PER CDC SPEC 88818000.
2. WHEN PWA IS SOLD AS A SPARE, FPP 96837728 MUST ACCOMPANY PWA.

3. INSTALL (F/N 40) "ROM SET" PER TABLE BELOW.
 INSURE IC PIN 1 MATCHES SOCKET PIN 1.

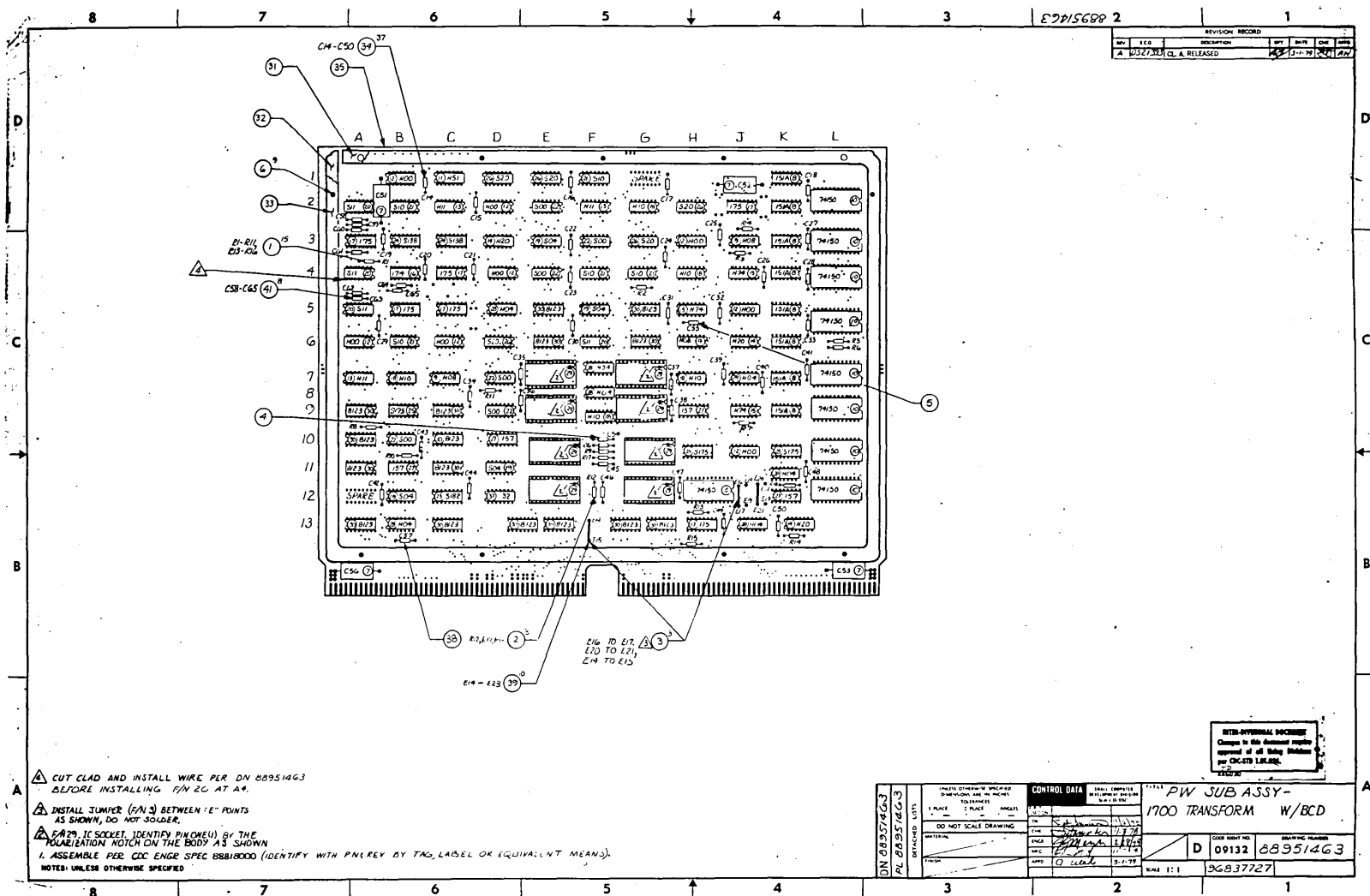
ROM SET	
PART NO.	IC LOCATION
96752663	E9
96752664	G9
96752665	E12
96752666	G12
96752667	E7
96752668	G7
96752669	E10
96752670	G10

Figure 2-2. 1700 Transform PWA (96837727) (Sheet 1 of 6)



GD CONTROL DATA CORPORATION		ASSEMBLY PARTS LIST				SPARE CODE S = SPARE PARTS N = NON-SPARE PARTS	
96837727	D	INA	D	PWA-1700 XFORM W/BCD BJCT	DSM MP17	09/21/78	06/27/79
ASSEMBLY NUMBER	REV	CLASS	DW	DESCRIPTION	DESIGN SOURCE	FIRST USAGE	PROCESSING DATE
FIND NUMBER	DW	PART NUMBER	QUANTITY	UNIT MEAS.	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER
43	D	88951463	1	PC	SUB ASSY-1700 TRANSFORM W/BCD	IN	021393
36	C	96735800	REF	PC	LOGIC-1700 XFORM,BCD 7DUT/BJCT	IN	022679
40	A	96752662	1	PC	ROM SET,VERSION E2 EMULATOR	IN	
INACTIVE							
NUMBER OF LINE ITEMS = 3 HIGHEST FIND NUMBER = 43							
PROJECT ENGINEER				SCMD		INTERDIVISIONAL DOCUMENT	

Figure 2-2. 1700 Transform PWA (96837727) (Sheet 2 of 6)



DATE	11-1-79	TITLE	PW SUB ASSY-1700 TRANSFORM W/BCD	PREFIX	PL	DOCUMENT NO.	88951463	REV.	A
DATE	11-1-79	DATA SYSTEMS	11-1-79	AVIATION DIVISION					
DATE	11-1-79	CODE IDENT	88132	FIRST USED ON					
SHEET REVISION STATUS									
REVISION RECORD									
REV	ECO	DESCRIPTION				DRFT	DATE	CHKD	APP
A	0521323	CL. A. RELEASED				64	5-1-79	AW	AW
NOTES:									
INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024. DETACHED LISTS									

AA888 REV. 8/71

AA6030

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CD CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

ASSEMBLY NUMBER	REV	CLASS	QW	ST	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
88951463	A	CLA	D		SUB ASSY-1700 TRANSFORM W/PCD	DS	MP17	02/26/79	02/26/79	

VIND NUMBER	QW	PART NUMBER	QUANTITY	UNIT MEAS.	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	QW	CA
1	C	24500063	1500		PC RES FXD .25W 1000 OHMS	IN			PPP4	N	N
2	C	24500087	300		PC RES FXD .25W 10000 OHMS	IN			PPP4	N	N
42	C	52629949	12		IN WIRE FLEC 30 GA WHITE	IN	039382		PPP1	N	N
41	A	84996715	8		PC CAP,CER 100V 150 PF	IN			PPP4	N	N
4	A	84996717	1		PC CAP,CER 100V 220 PF	IN			PPP4	N	N
5	A	84996719	1		PC CAP,CER 100V 330 PF	IN			PPP4	N	N
38	A	84996725	1		PC CAP,CER 100V 680 PF	IN			PPP4	N	N
6	A	88812400	9		PC RIVET-SEMI-TUBULAR,RRS .312 LG	IN			PPP4	N	N
7	A	88890500	4		PC CAP-FIXED AL,16VDC,100UF	IN			PPP4	N	N
8	A	88881100	8		PC IC 74151A TTL DATA SEL MUX	IN			PPP4	N	N
9	A	88881200	3		PC IC 74H08 TTL QUAD 2-INPUT AND	IN			PPP4	N	N
10	A	88881300	9		PC IC 74150 TTL 16-BIT SEL/MUX	IN			PPP4	N	N
11	A	88882000	1		PC IC 74H51 TTL DUAL 2-WIDE 2-INP	IN			PPP4	N	N
12	A	88882100	8		PC IC 74H00 TTL QUAD 2-I POS NAND	IN			PPP4	N	N
13	A	88882300	3		PC IC 74H11 TTL TRIPLE 3-INP AND	IN			PPP4	N	N
14	A	88882600	3		PC IC 74H20 TTL DUAL 4-I POS NAND	IN			PPP4	N	N
15	A	88882700	3		PC IC 74H74 TTL DUAL D EDGE F/F	IN			PPP4	N	N
16	A	88882800	1		PC IC 74174 TTL HEX D F/F W/CLEAR	IN			PPP4	N	N
17	A	88882900	6		PC IC 74175 TTL QUAD D F/F W/CLR	IN			PPP4	N	N
18	A	88883100	5		PC IC 74H10 TTL TPL 3-I POS NAND	IN			PPP4	N	N
19	A	88883700	4		PC IC 74S04 SCHOTTKY TTL HEX INV	IN			PPP4	N	N
20	A	88884100	4		PC IC 74S11 SCHOTTKY TTL TPL 3-I	IN			PPP4	N	N
21	A	88884200	5		PC IC 74S10 SCHOTTKY TTL 3-I NAND	IN			PPP4	N	N
22	A	88884500	6		PC IC 74S00 SCHOTTKY TTL QUAD 2-I	IN			PPP4	N	N
23	A	88885000	1		PC IC 74S182 TTL LOOK-AHEAD GEN	IN			PPP4	N	N
24	A	88885100	2		PC IC 74S139 TTL DECODER/MUX	IN			PPP4	N	N
25	A	88885200	3		PC IC 74S175 TTL QUAD D F/F W/CLR	IN			PPP4	N	N
26	A	88885300	5		PC IC 74S20 SCHOTTKY TTL DUAL 4-I	IN			PPP4	N	N
27	A	88886400	4		PC IC 74157 TTL QUAD 2-INPUT MUX	IN			PPP4	N	N
28	A	88886600	7		PC IC 74H04 TTL HEX INVERTER	IN			PPP4	N	N
29	A	88889102	8		PC SOCKET-IC 24 PIN,LOW PROFILE	IN			PPP4	N	N
30	A	88889200	10		PC SOCKET-SPR,MINI .017-.019 PIN	IN			PPP4	N	N
31	A	88896000	16		PC IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N	N
32	A	88896600	1		PC INSULATOR-CARD FRAME,UPPER	IN			PPP4	N	N
33	A	88896700	1		PC INSULATOR-CARD FRAME,LOWER	IN			PPP4	N	N
33	C	88896800	1		PC FRAME-CARD (CASTING)	IN			PPP4	N	N

AA 700-1 REV 7-78

SCMD

Figure 2-2. 1700 Transform PWA (96837727) (Sheet 4 of 6)

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

88951463		A	CLA	D	SUB ASSY-1700 TRANSFORM W/BCD			DS	MP17	02/26/79		02/26/79			
ASSEMBLY NUMBER		REV	CLASS	OW	SE	ASSEMBLY DESCRIPTION			DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE		PART NUMBER	
FIND NUMBER	REV	PART NUMBER		QUANTITY	UNIT	PART DESCRIPTION				IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	HC
34	A	88897800		37	PC	CAP-FIXED SOLID TANT,6VDC,12UF				IN			PPP4		
3	A	88945400		3	PC	JUMPER 24AWG TEF INSULATED .50				IN			PPP4		
35	D	96735600		1	PC	PWB-1700 XFORM W/BCD				IN			PPP4		
37	A	96744172		1	PC	IC 7432 TTL QUAD 2-IN OR GATE				IN			PPP4		
NUMBER OF LINE ITEMS = 40															
HIGHEST FIND NUMBER = 42															

AA 8700-1 REV. 7-75

PROJECT ENGINEER

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CTD.

DWN CHNG EMB NFB APPR	M. H. LIP 11-27-78 11-27-78 11-27-78 11-27-78	TITLE PW SUB ASSY- 1700 TRANSFORM W/BCD	PREFIX DN DOCUMENT NO. 88951463	REV. A
SHEET REVISION STATUS		FIRST USED ON		
(Empty grid for sheet revision status)		REVISION RECORD		
		REV A	ECO DS21393	DESCRIPTION CL A. RELEASED
NOTES:		INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.		
AA800 REV. 8-71		AAL030 PRINTED IN U.S.A.		

Figure 2-2. 1700 Transform PWA (96837727) (Sheet 5 of 6)

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO. DN 88951463	REV A
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A CUT CLAD BETWEEN:
(COMPONENT SIDE)
1. A4-9 & A4-10

B ADD WIRE (F/N 42) AS FOLLOWS
COMPONENT SIDE
1. A4-10 TO J3-13

AA3185 PRINTED IN U.S.A.

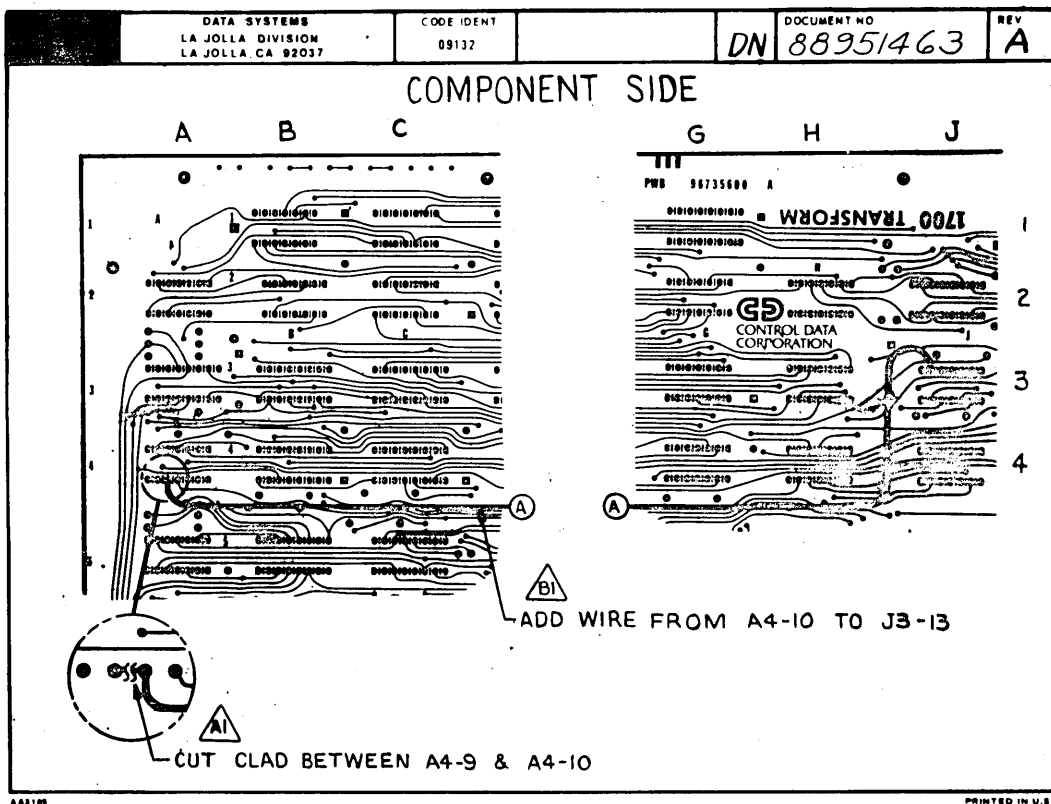
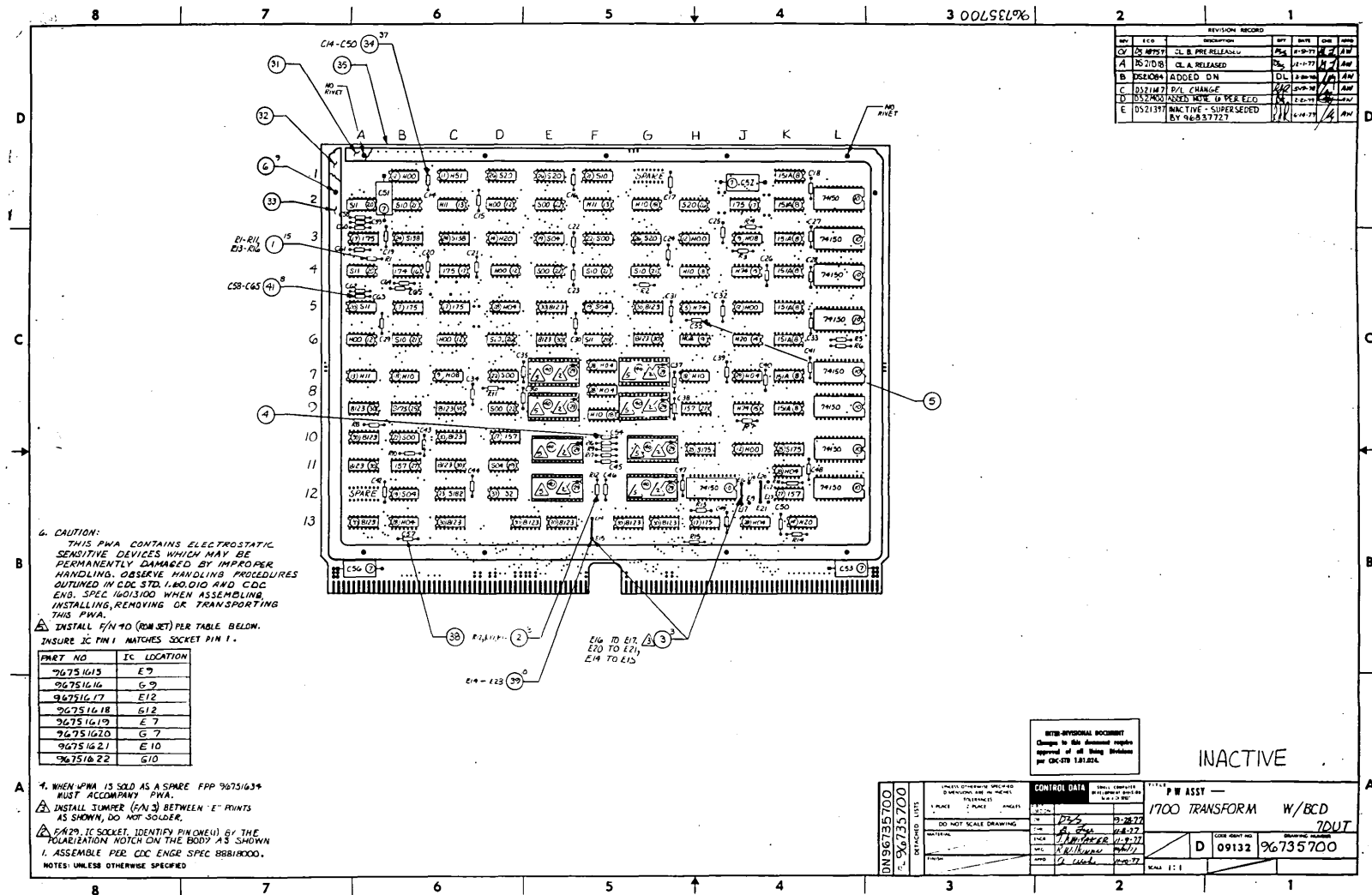


Figure 2-2. 1700 Transform PWA (96837727) (Sheet 6 of 6)

Figure 2-3. 1700 Transform PWA (96735700) (Sheet 1 of 4)



FORM 100-10	REV. 11-77	TITLE	PWA-1700 XFORM W/BCD	7DUT	PL	DOCUMENT NO.	96735700	REV.	E	
DATE	11-9-77	CODING	11-9-77	MP 17						
APPROVED	11-9-77	CODE IDENT	88132							
SHEET REVISION STATUS					REVISION RECORD					
					REV	ECO	DESCRIPTION	DRFT	DATE	APP
					-1		CL 0	RMB	11-1-77	AW
					-2	MP1299	SEE ECR	DS	11-1-77	AW
					DI	DS10157	CL B. PRE-RELEASED	DS	11-9-77	AW
					A	DS21018	CL A. RELEASED	DS	12-1-77	AW
					C	DS21147	ADDED F/N 42	DS	5-19-78	AW
					E	DS21397	INACTIVE-SUPERSEDED BY 96837727	DS	6-11-77	AW
NOTES:					INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CMC-STD 1.01.204.					
					INACTIVE DETACHED LISTS					

AA8100 REV. 8/71

PRINTED IN U.S.A.


CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

 SPARE CODE
 S = SPARE PARTS
 N = NON SPARE PARTS

96735700		E	INA	D	PWA-1700 XFORM W/HCD (7DUT)		DSM	MP17	11/09/77	06/02/79		
ASSEMBLY NUMBER	REV	CLASS	SW	ST	ASSEMBLY DESCRIPTION		DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER	
PART NUMBER	QTY	UNIT	PART DESCRIPTION		IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	DA		
1 C 24500063	1500	PC	RES FXD .25W 1000 OHMS		IN			PPP4	N			
2 C 24500087	300	PC	RFS FXD .25W 10000 OHMS		IN	021018	11/30/77	PPP4	N			
42 C 52629949	1200	IN	WIRE ELFC 30 GA WHITE		IN	039382	05/04/78	PPP1	N			
41 A 84996715	8	PC	CAP,CER 160V 150 PF		IN			PPP4	N			
4 A 84996717	1	PC	CAP,CER 100V 220 PF		IN			PPP4	N			
5 A 84996719	1	PC	CAP,CER 100V 330 PF		IN			PPP4	N			
38 A 84996725	1	PC	CAP,CER 100V 680 PF		IN			PPP4	N			
6 A 88812400	9	PC	RIVET-SEMI-TUBULAR,HRS .312 LG		IN			PPP4	N			
7 A 88880500	4	PC	CAP ELECT-ALUM 16VDC 100UF		IN			PPP4	N			
8 A 88881100	8	PC	IC 74151A TTL DATA SEL MUX		IN			PPP4	N			
9 A 88881200	3	PC	IC 74H08 TTL QUAD 2-INPUT AND		IN			PPP4	N			
10 A 88881300	9	PC	IC 74150 TTL 16-BIT SEL/MUX		IN			PPP4	N			
11 A 88882000	1	PC	IC 74H51 TTL DUAL 2-WIDE 2-IMP		IN			PPP4	N			
12 A 88882100	8	PC	IC 74H00 TTL QUAD 2-I POS NAND		IN			PPP4	N			
13 A 88882300	3	PC	IC 74H11 TTL TRIPLE 3-IMP AND		IN			PPP4	N			
14 A 88882600	3	PC	IC 74H20 TTL DUAL 4-I POS NAND		IN			PPP4	N			
15 A 88882700	3	PC	IC 74H74 TTL DUAL D EDGE F/F		IN			PPP4	N			
16 A 88882800	1	PC	IC 74174 TTL HEX D F/F W/CLEAR		IN			PPP4	N			
17 A 88882900	6	PC	IC 74175 TTL QUAD D F/F W/CLR		IN			PPP4	N			
18 A 88883100	5	PC	IC 74H10 TTL TPL 3-I POS NAND		IN			PPP4	N			
19 A 88883700	4	PC	IC 74S04 SCHOTTKY TTL HEX INV		IN			PPP4	N			
20 A 88884100	4	PC	IC 74S11 SCHOTTKY TTL TPL 3-I		IN			PPP4	N			
21 A 88884200	5	PC	IC 74S10 SCHOTTKY TTL 3-I NAND		IN			PPP4	N			
22 A 88884500	6	PC	IC 74S00 SCHOTTKY TTL QUAD 2-I		IN			PPP4	N			
23 A 88885000	1	PC	IC 74S182 TTL LOOK-AHEAD GEN		IN			PPP4	N			
24 A 88885100	2	PC	IC 74S138 TTL DECODER/MUX		IN			PPP4	N			
25 A 88885200	3	PC	IC 74S175 TTL QUAD D F/F W/CLR		IN			PPP4	N			
26 A 88885300	5	PC	IC 74S20 SCHOTTKY TTL DUAL 4-I		IN			PPP4	N			
27 A 88886400	4	PC	IC 74157 TTL QUAD 2-INPUT MUX		IN			PPP4	N			
28 A 88886600	7	PC	IC 74H04 TTL HEX INVERTER		IN			PPP4	N			
29 A 88889102	8	PC	SOCKET-IC 24 PIN,LOW PROFILE		IN			PPP4	N			
39 A 88889200	10	PC	SOCKET-SPP,MINI .017-.019 PIN		IN			PPP4	N			
30 A 88896000	16	PC	IC 8123 TTL TRI-STATE 2-IN MUX		IN			PPP4	N			
31 C 88896600	1	PC	INSULATOR-CARD FRAME,UPPER		IN			PPP4	N			
32 C 88896700	1	PC	INSULATOR-CARD FRAME,LOWER		IN			PPP4	N			
33 C 88896800	178	PC	FRAME-CARD (CASTING)		IN			PPP4	N			

AA 2708-1 REV. 7-78

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INTERDIVISIONAL DOCUMENT

Figure 2-3. 1700 Transform PWA (96735700) (Sheet 2 of 4)

ASSEMBLY PARTS LIST

SPARE CODE
S : SPARE PARTS
N : NON SPARE PARTS

96735700	F	INA	D	PW	700 XFORM W/HCD (7DUT)	DSM	MP17	11/09/77	06/02/79
ASSEMBLY NUMBER	REV	CLASS	QW	ST	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST ISSUE	RELEASE DATE	PROCESSING DATE

FIND NUMBER	QW	ST	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PN NC	QW	ST
34	A		88897200	1700	PC	CAP-FIXED SOLID TANT,6VDC,12UF	IN			PPP4	N		
3	A		88945400	300	PC	JUMPER 24AWG TEF INSULATED .50	IN			PPP4	N		
35	D		96735600	100	PC	PWB-1700 XFORM W/BCD	IN			PPP4	N		
36	C		96735800	REF	PC	LOGIC-1700 XFORM,BCD 7DUT/RJCT	IN			RFE4	N		
37	A		96744172	100	PC	IC 7432 TTL QUAD 2-IN OR GATE	IN			PPP4	N		
40	A		96751613	100	PC	ROM SET, VERSION D2 EMULATOR	IN			KT4	N		

NUMBER OF LINE ITEMS = 42
HIGHEST FIND NUMBER = 42

AA 2703-1 REV. 7-78

PROJECT ENGINEER

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INTERDIVISIONAL DOCUMENT

DWG	LINVILLE	21MAR79	GD	TITLE	PW ASSY - 1700 TRANSFORM W/BCD (7DUT)	PREFIX	DN	DOCUMENT NO.	96735700	REV.	E
CHKD	21MAR79	21MAR79	DATA SYSTEMS	FIRST USED ON							
ENG	21MAR79	21MAR79	LABORATORY DIVISION								
APP	21MAR79	21MAR79	CODE IDENT	09132							

SHEET REVISION STATUS									
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP			
B	DS21084	ADDED DN & RELEASED	DL	5-30-78	AW				
E	DS21397	INACTIVE - SUPERSEDED BY 96837727	RR	6-19-79	AW				

NOTES:

INTER-DIVISIONAL DOCUMENT
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INACTIVE

DETACHED LISTS

AA2100 REV. 8-71

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Figure 2-3. 1700 Transform PWA (96735700) (Sheet 3 of 4)

DATA	DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 09132	DOCUMENT NO 96735700	REV B
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A CUT CLAD BETWEEN COMPONENT SIDE

1. A4-9 & A4-10

B ADD WIRE (F/N 42) AS FOLLOWS COMPONENT SIDE

1. A4-10 TO J3-13

AA3100 PRINTED IN U.S.A.

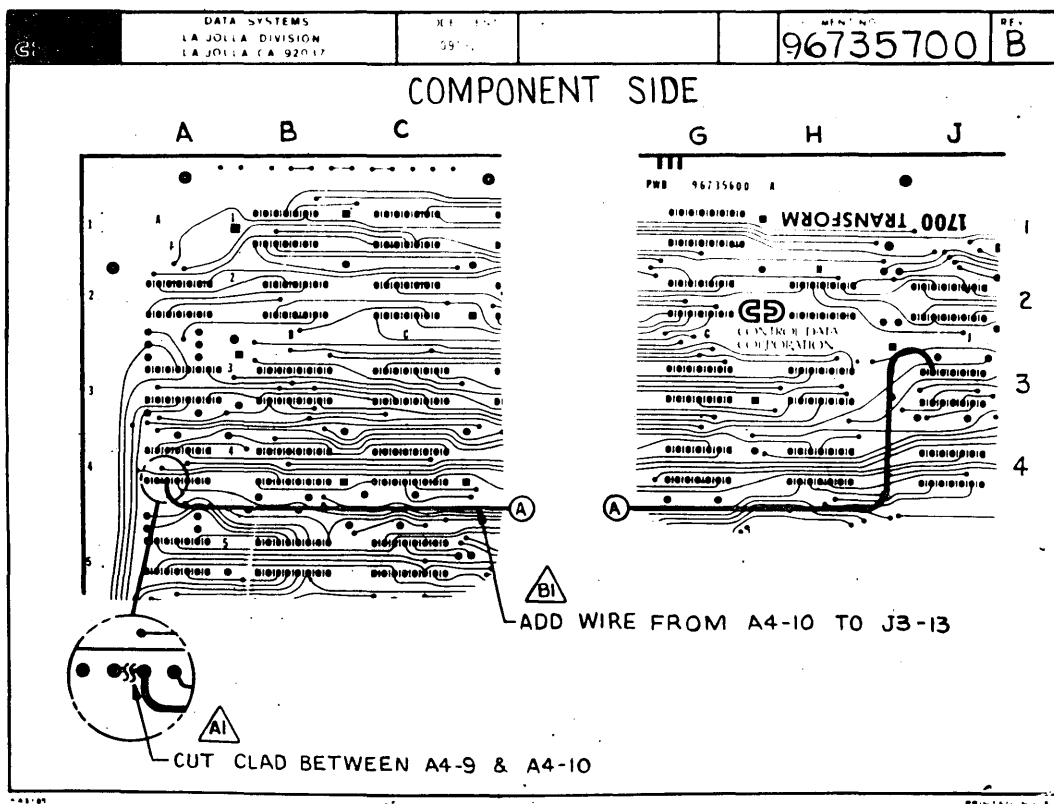
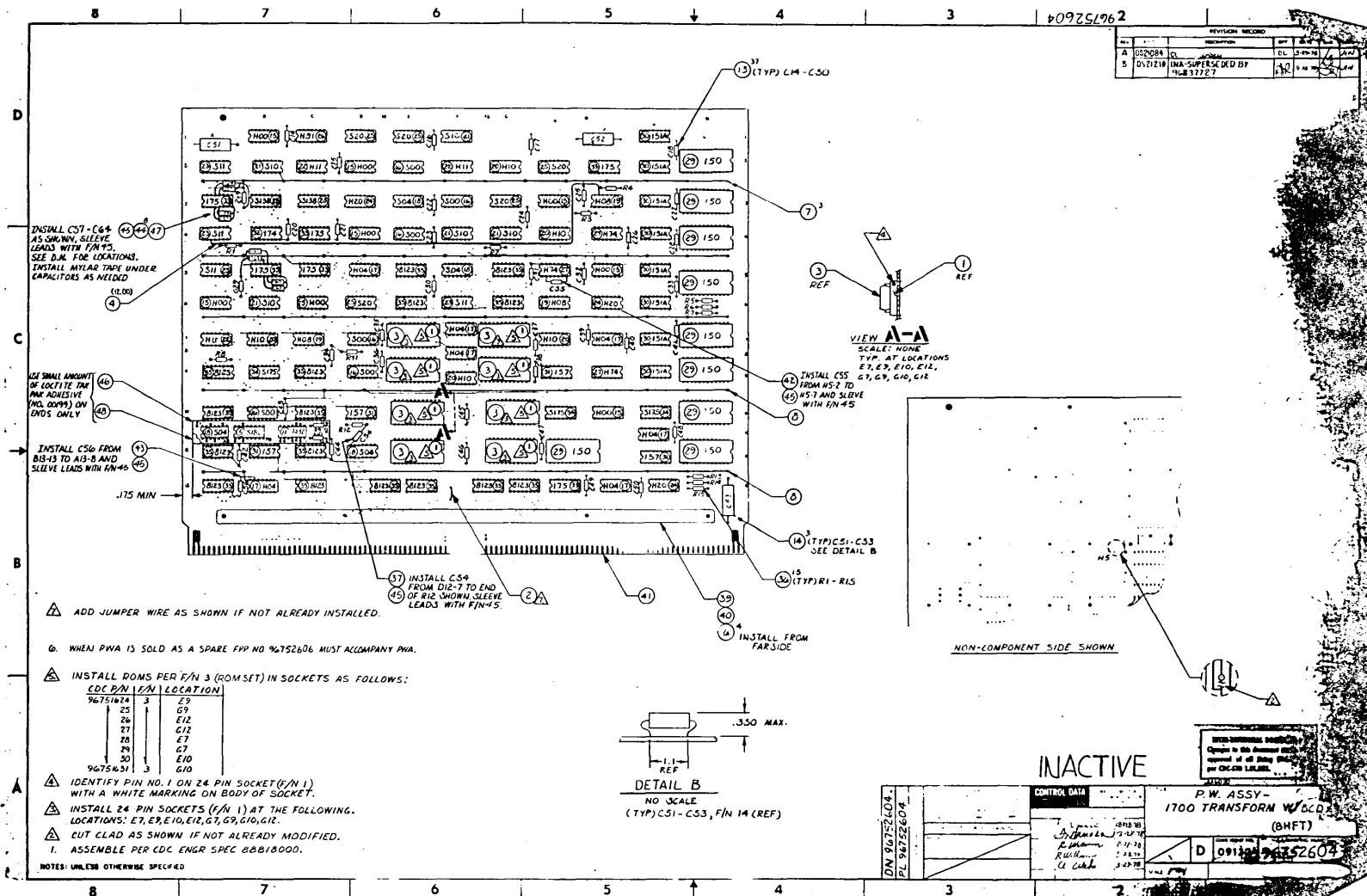


Figure 2-3. 1700 Transform PWA (96735700) (Sheet 4 of 4)

Figure 2-4. 1700 Transform PWA (96752604) (Sheet 1 of 6)



DWN	D. LINVILLE	DATE	3-22-78	TITLE	PWA-1700 TRANSFORM W/BCD (8HFT)	PREFIX	PL	DOCUMENT NO.	96752604	REV.	B
CHKD	R. D. Dwyer	DATE	3-22-78	DATA SYSTEMS	DATA SYSTEMS	FIRST USED ON					
ENG	R. D. Dwyer	DATE	3-22-78	LABOR DIVISION	LABOR DIVISION						
APP	R. D. Dwyer	DATE	3-22-78	CODE IDENT	09132						

SHEET REVISION STATUS									
REVISION RECORD									
REV	ECU	DESCRIPTION	DRFT	DATE	CHKD	APP			
A	DS21084	CL. A. RELEASED	DL	3-19-78		AW			
B	DS21210	INA-SUPERSEDED BY 9683772	RJR	9-28-78		AN			

INTER-DIVISIONAL DOCUMENT

Changes in this document require approval of all Using Divisions per APC-STD 1.01024

NOTES:

DETACHED LISTS

AA8188 REV. 8/71

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GD CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

96752604		B	INA	D	PWA-1700 XFORM W/HCD 8HFT		DSM	CBR 18	03/22/78	09/21/78	
ASSEMBLY NUMBER	REV	CLASS	SW	ST	ASSEMBLY DESCRIPTION		DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
PART NUMBER	SW	PART NUMBER	QUANTITY	UNIT MEAS.	PART DESCRIPTION		IN/OUT STATUS	CHANGE ORD. NUMBER	DATE	DATE	
36	C	24500063	15	PC	RES FXD .25W 1000 OHMS	IN				PPP4	N
45	C	24563700	6	IN	INSULATION SLEEVING HIGH TEMP	IN				PPP3	N
2	C	25195033	3	IN	WIRE TEF INSUL 24AWG WHITE	IN				PPP3	N
47	A	38881000	4	IN	TAPE,MYLAR-.001 THK 1/2 WIDE	IN				PPP3	N
9	A	39156102	REF	PC	SPEC-MARKING/LETTERING,INK	IN				RFE4	N
4	C	52629909	72	IN	WIRE ELFCT 30 GA SOLID WHITE	IN				PPP1	N
44	A	84996715	8	PC	CAP,CER 100V 150 PF	IN				PPP4	N
37	A	84996717	1	PC	CAP,CER 100V 220 PF	IN				PPP4	N
42	A	84996719	1	PC	CAP,CER 100V 330 PF	IN				PPP4	N
43	A	84996725	1	PC	CAP,CER 100V 680 PF	IN				PPP4	N
6	A	88812400	4	PC	RIVET-SEMI-TUBULAR,BPS .312 LG	IN				PPP4	N
7	D	88875500	3	PC	BUS BAR (13 IN)	IN				PPP4	N
14	A	88880500	3	PC	CAP-FIXED AL,16VDC,100UF	IN				PPP4	N
30	A	88881100	8	PC	IC 74151A TTL DATA SEL MUX	IN				PPP4	N
19	A	88881200	3	PC	IC 74H04 TTL QUAD 2-INPUT AND	IN				PPP4	N
9	A	88881300	9	PC	IC 74150 TTL 16-BIT SEL/MUX	IN				PPP4	N
26	A	88882000	1	PC	IC 74H51 TTL DUAL 2-WIDE 2-INP	IN				PPP4	N
15	A	88882100	8	PC	IC 74H00 TTL QUAD 2-1 POS NAND	IN				PPP4	N
22	A	88882300	3	PC	IC 74H11 TTL TRIPLE 3-1NP AND	IN				PPP4	N
24	A	88882600	3	PC	IC 74H20 TTL DUAL 4-1 POS NAND	IN				PPP4	N
27	A	88882700	3	PC	IC 74H74 TTL DUAL D EDGE F/F	IN				PPP4	N
32	A	88882800	1	PC	IC 74174 TTL HFX D F/F W/CLEAR	IN				PPP4	N
33	A	88882900	6	PC	IC 74175 TTL QUAD D F/F W/CLR	IN				PPP4	N
20	A	88883100	5	PC	IC 74H10 TTL TPL 3-1 POS NAND	IN				PPP4	N
18	A	88883700	4	PC	IC 74S04 SCHOTTKY TTL HEX INV	IN				PPP4	N
23	A	88884100	4	PC	IC 74S11 SCHOTTKY TTL TPL 3-1	IN				PPP4	N
21	A	88884200	5	PC	IC 74S10 SCHOTTKY TTL 3-1 NAND	IN				PPP4	N
16	A	88884500	6	PC	IC 74S00 SCHOTTKY TTL QUAD 2-1	IN				PPP4	N
5	A	88885000	1	PC	IC 74S182 TTL LOOK-AHEAD GEN	IN				PPP4	N
28	A	88885100	2	PC	IC 74S138 TTL DECODER/MUX	IN				PPP4	N
34	A	88885200	3	PC	IC 74S175 TTL QUAD D F/F W/CLR	IN				PPP4	N
25	A	88885300	5	PC	IC 74S20 SCHOTTKY TTL DUAL 4-1	IN				PPP4	N
31	A	88886400	4	PC	IC 74157 TTL QUAD 2-INPUT MUX	IN				PPP4	N
17	A	88886600	7	PC	IC 74H04 TTL HEX INVERTER	IN				PPP4	N
1	A	88889102	8	PC	SOCKET-IC 24 PIN,LOW PROFILE	IN				PPP4	N
12	A	88889500	REF	PC	SPEC-PC BOARD ASSY	IN				RFE4	N

AA 8700-1 REV 7/78

SCMD

INTERDIVISIONAL DOCUMENT

Figure 2-4. 1700 Transform PWA (96752604) (Sheet 2 of 6)

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

96752604	B	INA	D	PWA-1700 XFORM W/BCD 8HFT	DSM	C8R 18	03/22/78	09/21/78	
ASSEMBLY NUMBER	REV	CLASS	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE NO.	DATE EFFECTIVE	MAKE/BUY TYPE	REV	QTY
39	D	88895400	100	PC	STIFFENER-PC BOARD (CASTING)	IN			PPP4	N	
40	C	88895500	100	PC	INSULATOR-CARD STIFFENER	IN			PPP4	N	
35	A	88896000	1600	PC	IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N	
8	C	88896200	200	PC	BUS BAR	IN			PPE4	N	
13	A	88897000	3700	PC	CAP-FIXED SOLID TANT.6VDC,12UF	IN			PPP4	N	
11	A	96744172	100	PC	IC 7432 TTL QUAD 2-IN OR GATE	IN			PPP4	N	
41	A	96744222	100	PC	PWB-1700 TRANSFORM	IN			PPP4	N	
48	A	96750574	100	PC	INSULATOR, RCD PADDLE	IN			PYP4	N	
3	A	96751632	100	PC	ROM SET, VERSION D1 EMULATOR	IN			KTH4	N	
46	A	96752152	100	PC	PWB-RCD PADDLE BOARD	IN			PPP4	N	
10	D	96752605	REF	PC	LOGIC-1700 XFORM,BCD 8HFT/8JCT	IN			RFE4	N	

INACTIVE

INACTIVE

NUMBER OF LINE ITEMS = 47
HIGHEST FIND NUMBER = 48

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PROJECT ENGINEER
R WOERNER

SCWD

INTERDIVISIONAL DOCUMENT

OWN	D. UNVILLE	DATE	12/7/78	TITLE	PWA - 1700 TRANSPORT W/BCD (8HFT)	PREFIX	DN	DOCUMENT NO.	96752604	REV.	B
CHKD	R. WERNER	DATE	12/7/78	DATA SYSTEMS	LAJOLLA DIVISION	FIRST USED ON					
ENG	R. WERNER	DATE	12/7/78	CODE IDENT	09132						
APPD	R. WERNER	DATE	12/7/78								

SHEET REVISION STATUS				REVISION RECORD			
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP	
A	DS21084	CL A. RELEASED	DL	3-29-78	AW		
B	DS21210	INA-SUPERSEDED BY 96837727	RJR				

INTERDIVISIONAL DOCUMENT
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per CMA-STD 1.01.024.

NOTES:

DETACHED LISTS

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Figure 2-4. 1700 Transform PWA (96752604) (Sheet 3 of 6)

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO 96752604	REV A
--	---------------------	-------------------------	----------

2. WIRE ADDS

A. A11-2 TO B10-2			
B. A11-4 TO B10-4			
C. A11-9 TO B10-9			
D. A11-12 TO B10-12			
E. B11-1 FEED THRU K (FROM PIN 217)			
F. B11-3 PIN 13 (PASSING THROUGH FEED THRU H)			
G. B11-14 12 (6)			} USING F/N 4
H. B11-1 36 (A)			
J. B11-2 37 (B)			
K. B11-4 38 (C)			
L. B11-5 39 (D)			
M. B11-9 68 (E)			
N. B11-10 PIN 69 (PASSING THROUGH FEED THRU F)			
P. PAD E2 FEED THRU N			
Q. PAD E4 FEED THRU M			
R. PAD E1 POINT P (+5V BUS BAR)			} USING F/N 2
S. PAD E3 TO POINT Q (GND LEG OF FILTER CAP)			

3. ADD CAPACITORS (84996715) SLEEVE ALL LEADS WITH F/N 45

A. A3-4 TO A3-8 (GND) C59			
B. A3-5 TO A3-8 C58			
C. A3-12 C19 C57			
D. A3-13 C19 C64			
E. B5-4 B5-8 C63			
F. B5-5 B5-8 C60			
G. B5-12 C29 C61			
H. B5-13 TO C29 (GND) C62			

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO 96752604	REV A
--	---------------------	-------------------------	----------

1. CUT CLAD BETWEEN COMPONENT SIDE

G. A4-9 & A4-10

2. ADD WIRE (F/N 4) AS FOLLOWS COMPONENT SIDE

T. A4-10 TO J3-13

Figure 2-4. 1700 Transform PWA (96752604) (Sheet 4 of 6)

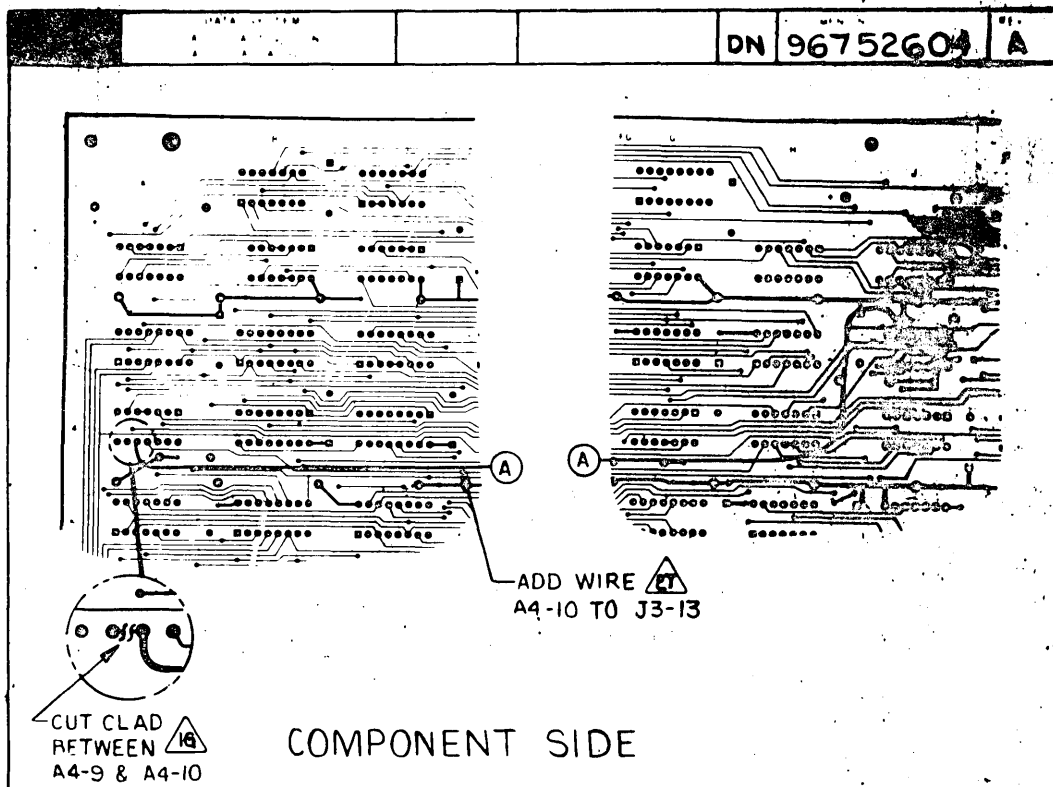
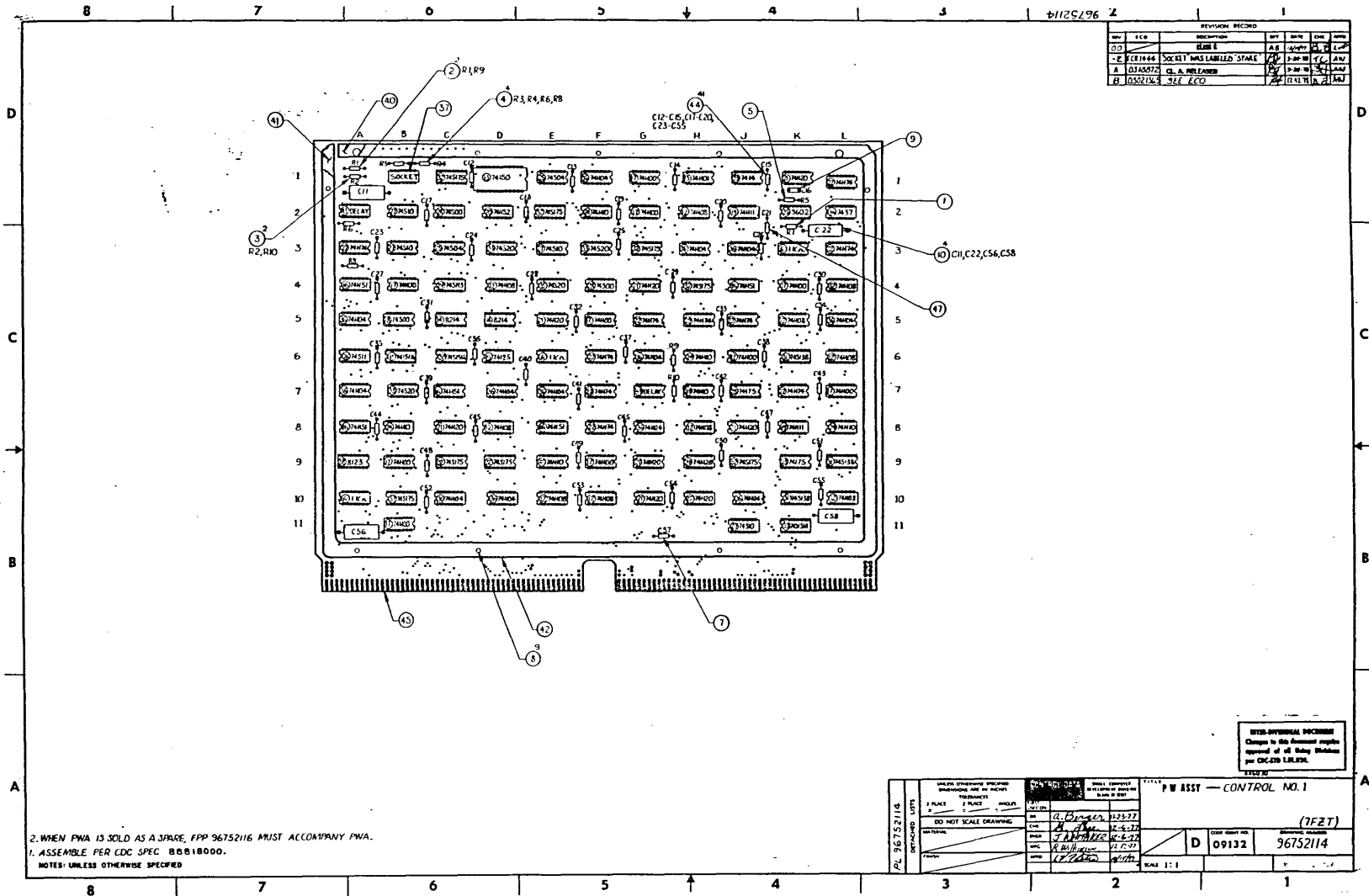


Figure 2-4. 1700 Transform PWA (96752604) (Sheet 6 of 6)

Figure 2-5. Control 1 PWA (96752114) (Sheet 1 of 3)



INTERDIVISIONAL DOCUMENT

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

96752114		H	CLA	D	PWA-CONTROL NO.1 7F/T		OSH	MP17	03/22/76		12/09/78		
ASSEMBLY NUMBER		REV	CLASS	REV	ASSEMBLY DESCRIPTION		SOURCE	FIRST	RELEASE DATE		PROCESSING DATE	PAGE NUMBER	
FIND NUMBER		REV	PART NUMBER		QUANTITY	UNIT	PART DESCRIPTION		IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	DATE/REV	REV
36	A	8889600	1300	PC	IC 74-14 TTL HEX INVERTER		IN					PPP4	
37	A	8889101	100	PC	SOCKET-IC 14 PIN, LOW PROFILE		IN					PPP4	
38	A	8889600	100	PC	IC 8123 TTL TRI-STATE 2-IN MUX		IN					PPP4	
39	A	88896100	100	PC	IC 7414 TTL HEX SCHMITT TRIGGER		IN					PPP4	
40	C	8889600	100	PC	INSULATOR-CARD FRAME, UPPER		IN					PPP4	
41	C	88896700	100	PC	INSULATOR-CARD FRAME, LOWER		IN					PPP4	
42	C	8889600	100	PC	FRAME-CARD (CASTING)		IN					PPP4	
43	A	88897301	200	PC	DELAY LINE, TAPERED, 30MS 100 OHM		IN					PPP4	
44	A	88897400	4100	PC	CAP-FIXED SOLID TANT, 6VDC, 12UF		IN					PPP4	
45	D	96752113	100	PC	PWA-CONTROL NO.1		IN					PPP4	
46	D	96752115	REF	PC	LOW IC DIAG-CONTROL NO.1 7F/T		IN					PPP4	
NUMBER OF LINE ITEMS = 47													
HIGHEST FIND NUMBER = 47													

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PROPERTY NUMBER

SCM0

INTERDIVISIONAL DOCUMENT

Figure 2-5. Control 1 PWA (96752114) (Sheet 3 of 3)

Figure 2-6. Control 1 PMA (96751017) (Sheet 1 of 6)

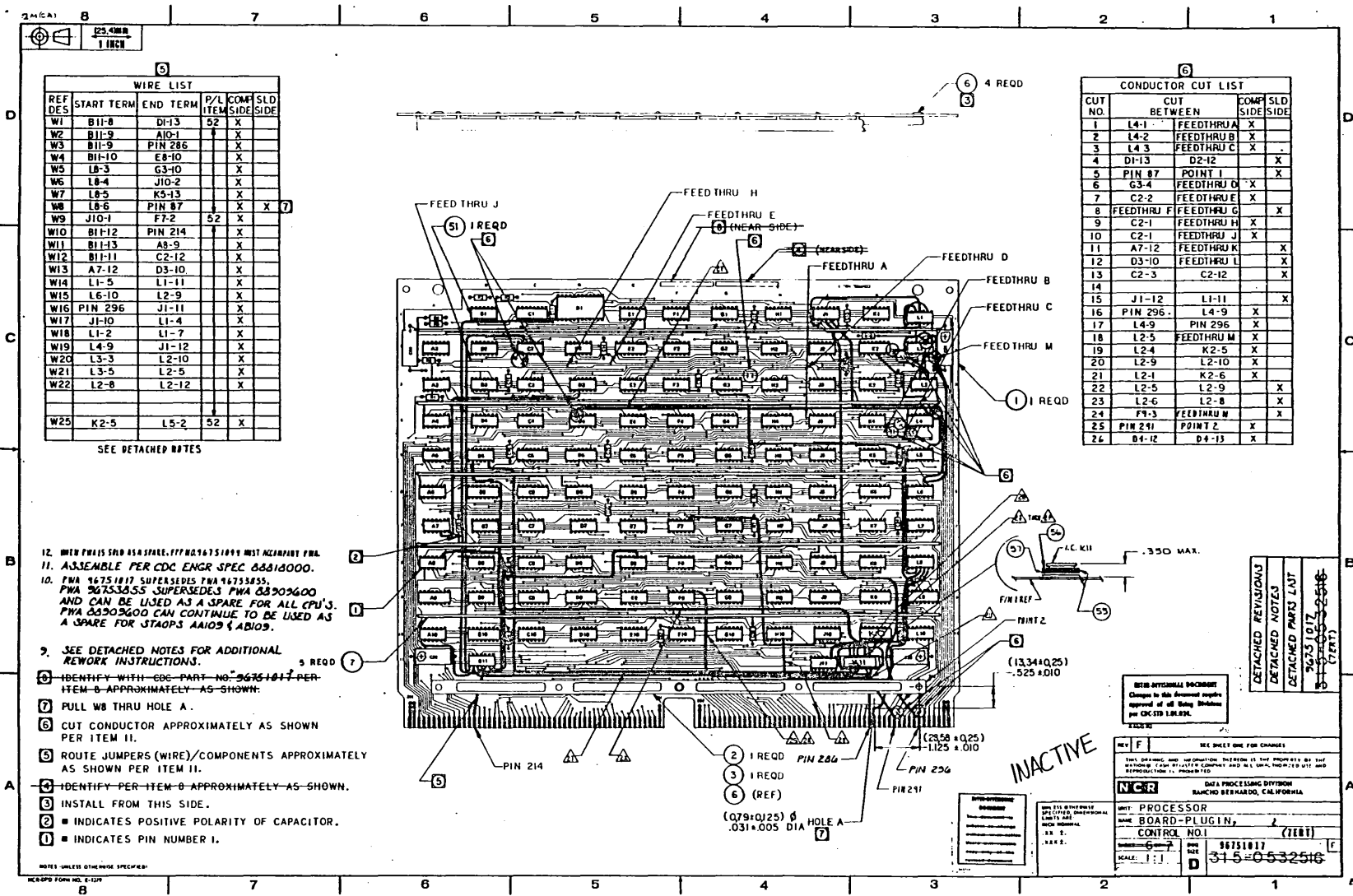
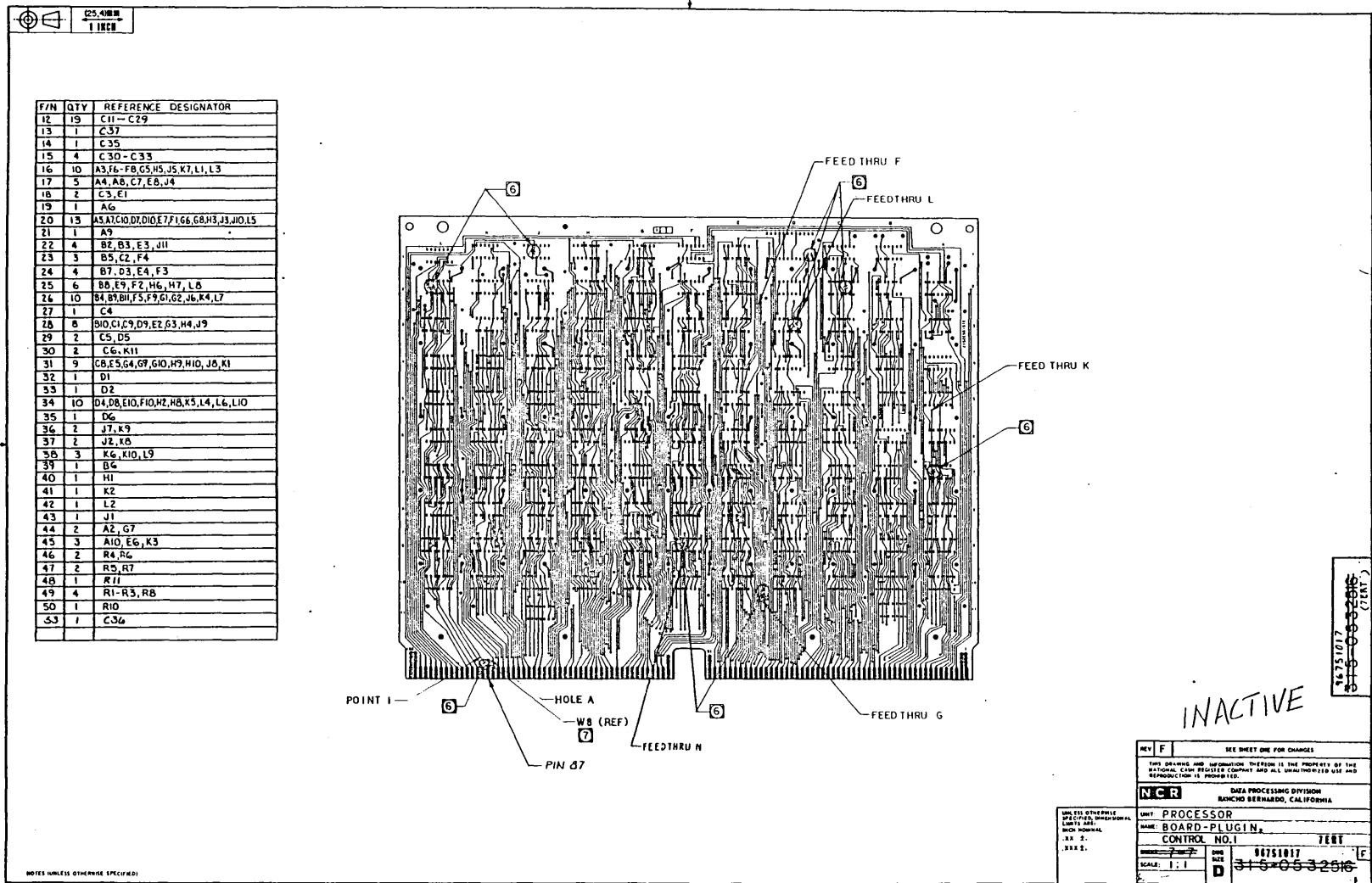


Figure 2-6. Control 1 PMA (96751017) (Sheet 2 of 6)



DWN	<i>Pat. [illegible]</i>	8-5-77	TITLE	PWA CONTROL NO.1 (7ERT)	PREFIX	DOCUMENT NO.	REV.
CHKD	<i>[illegible]</i>	8-12-77	FIRST USED ON	MP16C	DR	96751017	E
ENG	<i>[illegible]</i>	8-10-77	DATA SYSTEMS				
MFG	<i>[illegible]</i>	8-10-77	LAJOLLA DIVISION				
APPR	<i>[illegible]</i>	8-10-77	CODE IDENT	08132			

SHEET REVISION STATUS				REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP				
A	DS14950	CL. A. RELEASED	PEP	9-28-77	AW				
B	DS021050	K11 WAS PB-K10	BAB	1-17-78	AW				
C	DS21076	INACTIVE SUPERSEDED BY 96752114	RJR	6-15-78	AW				
D	DS21222	REMOVED F/N 445	O.M.	6-30-78	AW				
E	DS21259	ADDED C35	JSH	7-20-78	AW				
F	DS21319	SEE ECO	JSH	11-8-78	AW				

INTER-DIVISIONAL DOCUMENT

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NOTES:

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DWN	<i>Pat. [illegible]</i>	8-5-77	TITLE	PWA-CONTROL NO.1 (7ERT)	PREFIX	DOCUMENT NO.	REV.
CHKD	<i>[illegible]</i>	8-12-77	FIRST USED ON	MP16C	PL	96751017	F
ENG	<i>[illegible]</i>	8-12-77	DATA SYSTEMS				
MFG	<i>[illegible]</i>	8-12-77	LAJOLLA DIVISION				
APPR	<i>[illegible]</i>	8-12-77	CODE IDENT	08132			

SHEET REVISION STATUS				REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP				
A	DS14950	CL. A. RELEASED	PEP	9-28-77	AW				
B	DS021050	ADDED P/Ns 55,56,57	BAB	1-17-78	AW				
C	DS21076	INACTIVE SUPERSEDED BY 96752114	RJR	6-30-78	AW				
D	DS21222	REMOVED F/N 445	O.M.	6-30-78	AW				
E	DS21259	ADDED F/N 14	JSH	7-20-78	AW				

INTER-DIVISIONAL DOCUMENT

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NOTES:

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DETACHED LISTS

AA0100 REV. 8/71

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Figure 2-6. Control 1 PWA (96751017) (Sheet 3 of 6)

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

96751017	F	INA	D	PWA-CONTROL NO.1 7ERT	DSM	MP16C	09/24/77	11/07/78	
ASSEMBLY NUMBER	REV	CLASS	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	NC	IN
50	C	17705905	100	PC	RES FXD .25W 51000 OHMS	IN			PPP4	N		
46	C	24500043	200	PC	RES FXD .25W 150 OHMS	IN			PPP4	N		
47	C	24500052	200	PC	RES FXD .25W 360 OHMS	IN			PPP4	N		
49	C	24500063	400	PC	RES FXD .25W 1000 OHMS	IN			PPP4	N		
48	C	24500094	100	PC	RES FXD .25W 20000 OHMS	IN			PPP4	N		
8	A	39156102	REF	PC	SPEC-MARKING/LETTERING, INK	IN			RFE4	N		
54	A	39181003	400	IN	INSULATION, TFFLON, 24 AWG	IN			PPP3	N		
52	C	52629909	22400	IN	WIPE FLECT 30 GA SOLID WHITE	IN			PPP1	N		
55	A	62019900	25	OZ	EPOXY, 2 PART 5 MIN(CLEAR)TURE	IN	021050	121577	PPP3	N		
45	A	75009901	300	PC	RESISTOR MODULE 1K OHM 2 0/0	IN			PPP4	N		
53	A	84996717	100	PC	CAP, CFR 100V 220 PF	IN			PPP4	N		
14	A	84996729	100	PC	CAP, CFR 100V 1000 PF	IN	021259	071278	PPP4	N		
6	A	88812400	400	PC	RIVET-SEMI-TUBULAR, RRS .312 LG	IN			PPP4	N		
4	A	88875200	100	PC	TAG IDENTIFICATION, CARD	OUT	021222	062070	PPP4	N		
7	D	88875500	500	PC	BUS BAR (13 IN)	IN			PPP4	N		
13	A	88890400	100	PC	CAP-FIXED CER, 25VDC, .1UF, 20PCT	IN			PPP4	N		
15	A	88890500	400	PC	CAP-FIXED AL, 16VDC, 100UF	IN			PPP4	N		
39	A	88881100	100	PC	IC 74151A TTL DATA SEL MUX	IN			PPP4	N		
34	A	88881200	1000	PC	IC 74404 TTL QUAD 2-INPUT AND	IN			PPP4	N		
32	A	88881300	100	PC	IC 74150 TTL 16-BIT SEL/MUX	IN			PPP4	N		
29	A	88881700	200	PC	IC 8214 TTL DUAL 4/1 MUX	IN			PPP4	N		
35	A	88881800	100	PC	IC 74125 TTL QUAD BFR TRISTATE	IN			PPP4	N		
17	A	88882000	900	PC	IC 74451 TTL DUAL 2-WIDE 2-IMP	IN			PPP4	N		
26	A	88882100	1000	PC	IC 74400 TTL QUAD 2-I POS NAND	IN			PPP4	N		
40	A	88882200	100	PC	IC 74401 TTL QUAD 2-I POS NAND	IN			PPP4	N		
37	A	88882300	200	PC	IC 74411 TTL TRIPLE 3-IMP AND	IN			PPP4	N		
33	A	88882500	100	PC	IC 74452 TTL EXPAN 2-2-2-3 IMP	IN			PPP4	N		
31	A	88882600	900	PC	IC 74420 TTL DUAL 4-I POS NAND	IN			PPP4	N		
16	A	88882700	1000	PC	IC 74474 TTL DUAL D EDGE F/F	IN			PPP4	N		
36	A	88882900	200	PC	IC 74175 TTL QUAD D F/F W/CLR	IN			PPP4	N		
25	A	88883100	400	PC	IC 74410 TTL TPL 3-I POS NAND	IN			PPP4	N		
18	A	88883700	200	PC	IC 74504 SCHOTTKY TTL HEX INV	IN			PPP4	N		
19	A	88884100	100	PC	IC 74511 SCHOTTKY TTL TPL 3-I	IN			PPP4	N		
22	A	88884200	400	PC	IC 74510 SCHOTTKY TTL 3-I NAND	IN			PPP4	N		
23	A	88884500	300	PC	IC 74500 SCHOTTKY TTL QUAD 2-I	IN			PPP4	N		
27	A	88884600	100	PC	IC 745113 SCHOTTKY TTL DUAL	IN			PPP4	N		

INACTIVE

INACTIVE

AA 8708-1 REV 7-78

SCMD

INTERDIVISIONAL DOCUMENT

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

96751017	F	INA	D	PWA-CONTROL NO.1 7ERT	DSM	MP16C	09/24/77	11/07/78	
ASSEMBLY NUMBER	REV	CLASS	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	NC	IN
30	A	88884700	200	PC	IC 745151A TTL DATA SEL/MUX	IN			PPP4	N		
38	A	88885100	300	PC	IC 745138 TTL DECODER/MUX	IN			PPP4	N		
28	A	88885200	400	PC	IC 745175 TTL QUAD D F/F W/CLR	IN			PPP4	N		
24	A	88885300	400	PC	IC 74520 SCHOTTKY TTL DUAL 4-I	IN			PPP4	N		
42	A	88885600	100	PC	IC 7447 TTL QUAD 2IMP NAND BFR	IN			PPP4	N		
41	A	88886500	100	PC	IC 9602 TTL DUAL MONOSTAB MVB	IN			PPP4	N		
20	A	88886600	1300	PC	IC 74404 TTL HEX INVERTER	IN			PPP4	N		
5	A	88887604	100	PC	LABEL IDENTIFICATION, K20	OUT	021222	062070	PPP4	N		
51	A	88889101	100	PC	SOCKET-IC 14 PIN, LOW PROFILE	IN			PPP4	N		
11	A	88889500	REF	PC	SPEC-PC BOARD ASSY	IN			RFE4	N		
2	D	888895400	100	PC	STIFFENER-PC BOARD (CASTING)	IN			PPP4	N		
3	C	888895500	100	PC	INSULATOR-CARD STIFFENER	IN			PPP4	N		
21	A	888896000	100	PC	IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N		
43	A	888896100	100	PC	IC 7414 TTL HEX SCHMITT TRIGER	IN			PPP4	N		
44	A	888897301	200	PC	DELAY LINE, TAPPED, 30NS 100 OHM	IN			PPP4	N		
12	A	888897800	1900	PC	CAP-FIXED SOLID TANT, 6VDC, 12UF	IN			PPP4	N		
1	A	96744223	100	PC	PWB-CONTROL NUMBER 1	IN			PPP4	N		
9	A	96751018	REF	PC	LOGIC DIAGRAM-CNTRL NO.1 7ERT	IN			RFE4	N		
56	A	96751901	100	PC	PWB-INT, CKT MTG	IN	021050	121577	AYE4	N		
57	A	96752001	100	PC	INSULATOR INT CKT PWB	IN	021050	121577	PYE4	N		

INACTIVE

NUMBER OF LINE ITEMS = 56
HIGHEST FIND NUMBER = 57

AA 8708-1 REV 7-78

SCMD

INTERDIVISIONAL DOCUMENT

Figure 2-6. Control 1 PWA (96751017) (Sheet 4 of 6)

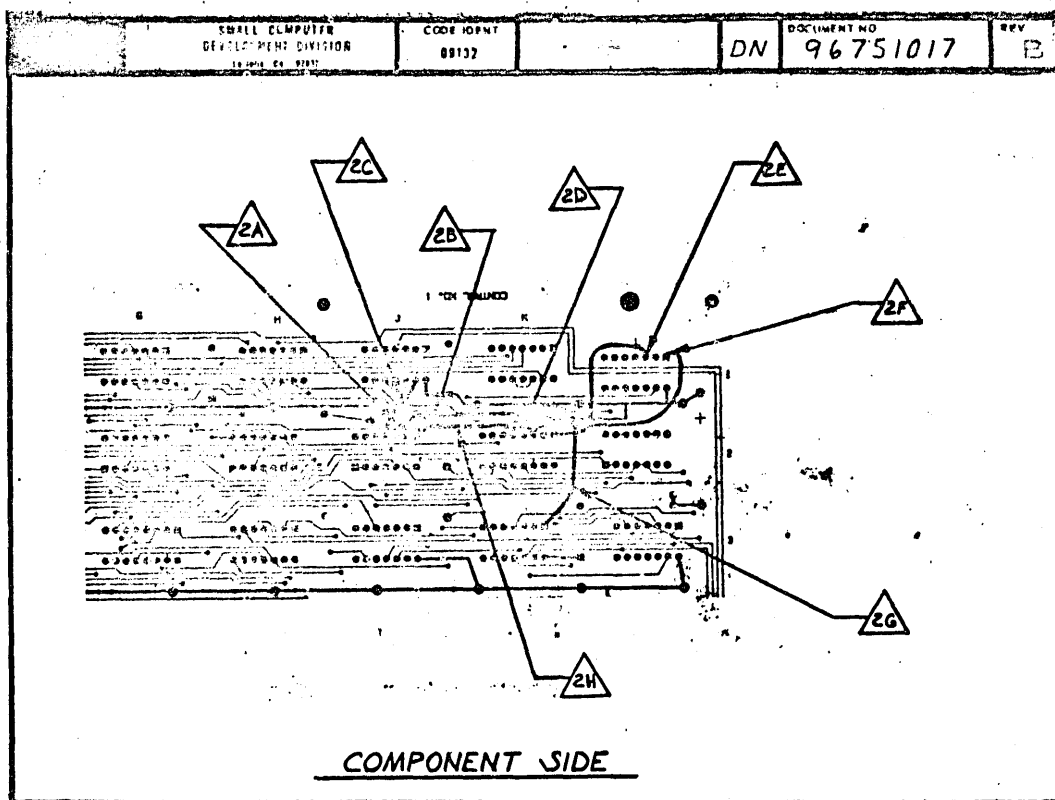
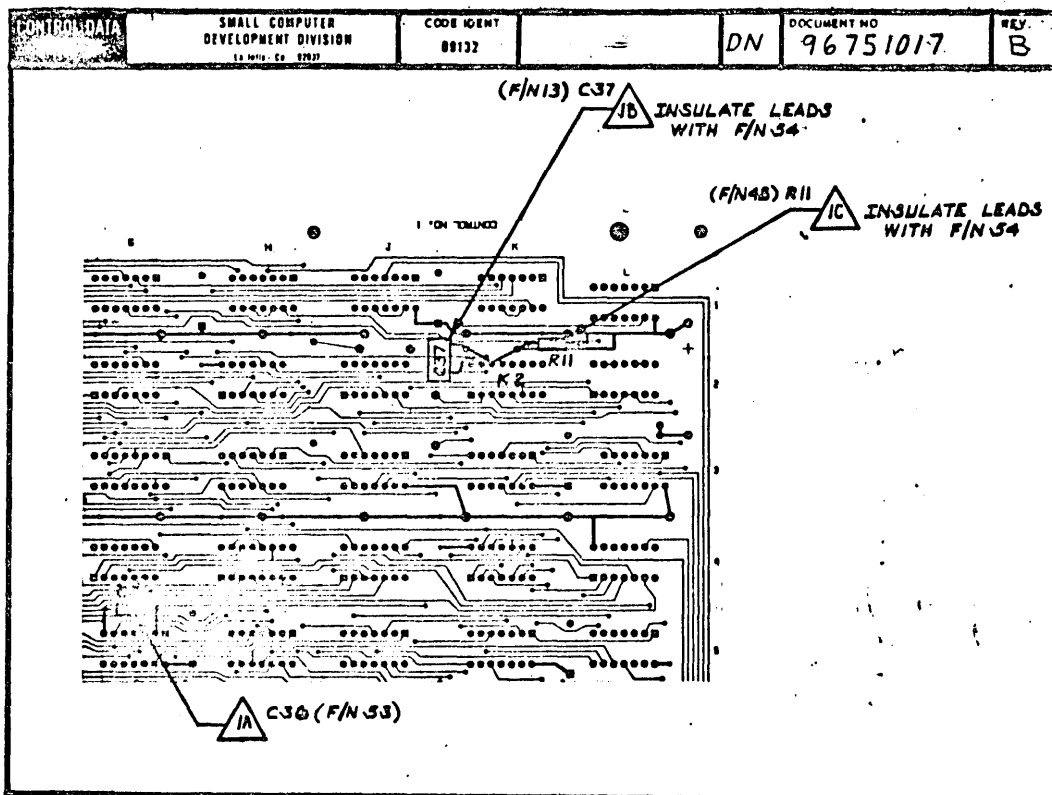
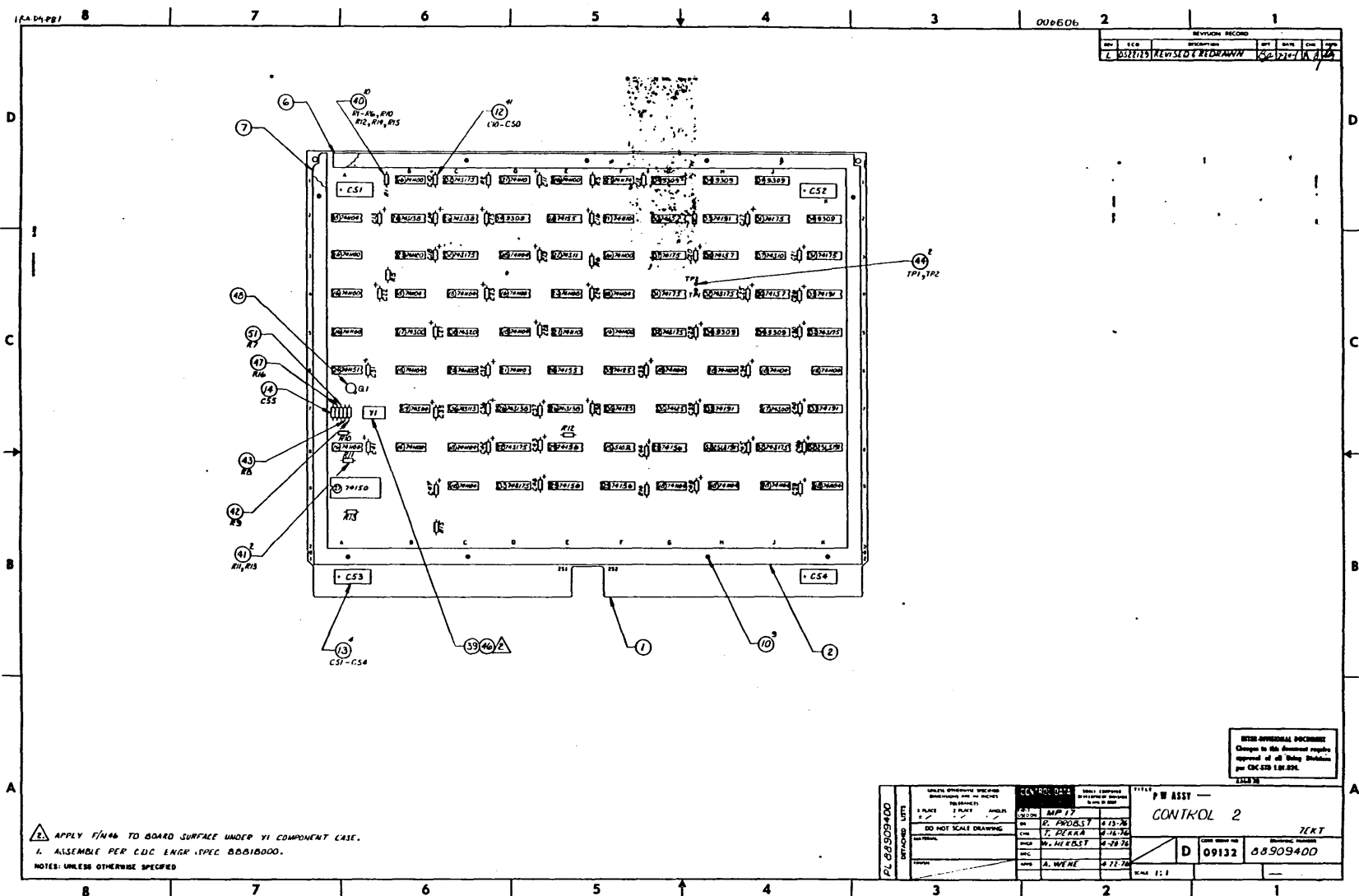


Figure 2-6. Control 1 PWA (96751017) (Sheet 6 of 6)

Figure 2-7. Control 2 PWA (88909400) (Sheet 1 of 2)



ASSEMBLY PARTS LIST

88909400	L	A	D	PWA-CONTROL NO.2 (7EKT)	DSM	WP17	09/20/74	022129	07/21/81	
ASSEMBLY NUMBER	REV	CL	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE NO.	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	INPUT STATUS	CHANGE NO.	DATE EFFECTIVE	NAME/OUT	PN	Q
52	A	15163200	2.00	PC	IC-2EL5191 TTL UP/DOWN CNTL CN	IN	014435	052278	PPD4	N	N
42	C	24500031	1.00	PC	RES FXD .25W 47 OHMS	IN	014435	041676	PPD4	N	N
47	C	24500043	1.00	PC	RES FXD .25W 150 OHMS	IN	014435	041676	PPD4	N	N
43	C	24500050	1.00	PC	RES FXD .25W 300 OHMS	IN	014435	041676	PPD4	N	N
41	C	24500055	2.00	PC	RES FXD .25W 470 OHMS	IN	014435	041676	PPD4	N	N
40	C	24500063	10.00	PC	RES FXD .25W 1000 OHMS	IN	014435	041676	PPD4	N	N
51	C	24500064	1.00	PC	RES FXD .25W 1400 OHMS	IN	014435	041676	PPD4	N	N
40	C	24503702	2.00	IN	INCL SLEEVING HIGH TEMP PG 64	IN	014435	041676	PPD3	N	N
40	C	24503702	2.00	IN	INCL SLEEVING HIGH TEMP PG 64	OUT	022129	120141	PPD3	N	N
44	A	25104007	2.00	IN	TAPE,POLYESTER FILM,WHITE	IN	014435	041676	PPD4	N	N
45	C	25105033	15.00	IN	LINE TFF INCL 2440G WHITE	IN	014815	052278	PPD3	N	N
45	C	25105033	15.00	IN	LINE TFF INCL 2440G WHITE	OUT	022129	120141	PPD3	N	N
11	A	30156100	DEF	PC	CRFG MARKING/LETTERING,INK	IN	014435	041676	PPF4	N	N
11	A	30156100	DEF	PC	CRFG MARKING/LETTERING,INK	OUT	022129	120141	PPF4	N	N
50	A	30337000	1.00	PC	ATE PAD TRANSISTOR .050X.001	IN	014435	041676	PPD4	N	N
50	A	30337000	1.00	PC	ATE PAD TRANSISTOR .050X.001	OUT	022129	120141	PPD4	N	N
48	A	76556500	1.00	PC	TRANSISTOR-SILICON,NPN 2N2340	IN	014435	041676	PPD4	N	N
14	A	80094743	1.00	PC	CAP,CER 100V .01 MF	IN	014435	041676	PPD4	N	N
10	A	80012400	4.00	PC	DIODE,SEMI THRUAD,DO-313 LG	IN	014435	041676	PPD4	N	N
10	A	80012400	4.00	PC	DIODE,SEMI THRUAD,DO-313 LG	OUT	022129	120141	PPD4	N	N
3	D	80075500	1.00	PC	TAN IDENTIFICATION,CARD	IN	014435	041676	PPD4	N	N
3	D	80075500	1.00	PC	TAN IDENTIFICATION,CARD	OUT	021222	062078	PPD4	N	N
4	D	80075500	4.00	PC	DWG PAD (12 IN)	IN	014435	041676	PPD4	N	N
4	D	80075500	4.00	PC	DWG PAD (12 IN)	OUT	022129	120141	PPD4	N	N
13	A	88880500	4.00	PC	CAP FLECT-ALUM 16VDC 100UF	IN	014435	041676	PPD4	N	N
20	A	88881200	2.00	PC	IC 74H04 TTL QUAD 2-INPUT AND	IN	014435	041676	PPD4	N	N
27	A	88881300	1.00	PC	IC 74150 TTL 16-BIT SCL/MUX	IN	014435	041676	PPD4	N	N
28	A	88881400	2.00	PC	IC 74155 TTL 2/4 DECODER/MUX	IN	014435	041676	PPD4	N	N
29	A	88881500	4.00	PC	IC 74156 TTL 2/4 L/DECODE/DEMUX	IN	014435	041676	PPD4	N	N
35	A	88881600	3.00	PC	IC 74125 TTL QUAD RPT TRISTATE	IN	014435	041676	PPD4	N	N
24	A	88882000	1.00	PC	IC 74H01 TTL DUAL 2-WIDE 2-IMP	IN	014435	041676	PPD4	N	N
16	A	88882100	10.00	PC	IC 74H00 TTL QUAD 2-I POS NAND	IN	014435	041676	PPD4	N	N
23	A	88882600	1.00	PC	IC 74H20 TTL DUAL 4-I POS NAND	IN	014435	041676	PPD4	N	N
25	A	88882700	1.00	PC	IC 74H74 TTL DUAL D EDGE F/F	IN	014435	041676	PPD4	N	N
31	A	88882900	4.00	PC	IC 74175 TTL QUAD D F/F W/CLR	IN	014435	041676	PPD4	N	N
21	A	88883100	4.00	PC	IC 74H10 TTL TPL 3-I POS NAND	IN	014435	041676	PPD4	N	N

SCMD MFG INFO

INTERDIVISIONAL DOCUMENT

ASSEMBLY PARTS LIST

88909400	L	A	D	PWA-CONTROL NO.2 (7EKT)	DSM	WP17	09/20/74	022129	07/21/81	
ASSEMBLY NUMBER	REV	CL	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE NO.	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	INPUT STATUS	CHANGE NO.	DATE EFFECTIVE	NAME/OUT	PN	Q
34	A	88883400	7.00	PC	IC 9300 TTL DUAL 4-INPUT MUX	IN	014435	041676	PPD4	N	N
19	A	88883700	1.00	PC	IC 74504 SCHOTTKY TTL HEX INV	IN	014435	041676	PPD4	N	N
22	A	88884100	1.00	PC	IC 74511 SCHOTTKY TTL TPL 3-I	IN	014435	041676	PPD4	N	N
37	A	88884200	1.00	PC	IC 74510 SCHOTTKY TTL 3-I NAND	IN	014435	041676	PPD4	N	N
17	A	88884500	2.00	PC	IC 74500 SCHOTTKY TTL QUAD 2-I	IN	014435	041676	PPD4	N	N
36	A	88884600	1.00	PC	IC 74513 SCHOTTKY TTL DUAL	IN	014435	041676	PPD4	N	N
24	A	88885100	4.00	PC	IC 74517 TTL DECODER/MUX	IN	014435	041676	PPD4	N	N
32	A	88885200	4.00	PC	IC 74520 SCHOTTKY TTL DUAL 4-I	IN	014435	041676	PPD4	N	N
34	A	88885300	1.00	PC	IC 74520 SCHOTTKY TTL DUAL 4-I	IN	014435	041676	PPD4	N	N
33	A	88889000	4.00	PC	IC 74191 TTL UP/DOWN COUNT CNTR	IN	014435	041676	PPD4	N	N
30	A	88889400	3.00	PC	IC 74157 TTL QUAD 2-INPUT MUX	IN	014435	041676	PPD4	N	N
18	A	88889600	17.00	PC	IC 74H04 TTL HEX INVERTER	IN	014435	041676	PPD4	N	N
39	A	88889800	1.00	PC	CRYSTAL UNIT-QUARTZ,6.9152 MHZ	IN	014435	041676	PPD4	N	N
0	A	88889700	1.00	PC	LABEL IDENTIFICATION,430	IN	014435	041676	PPD4	N	N
0	A	88889700	1.00	PC	LABEL IDENTIFICATION,430	OUT	021222	062078	PPD4	N	N
15	A	88889500	1.00	PC	RES NETWORK-14 PIN DIP,510 OHM	IN	014435	041676	PPD4	N	N
44	A	88889200	2.00	PC	SOCKET-SMD,MINT .017-.019 PIN	IN	014435	041676	PPD4	N	N
0	A	88889500	DEF	PC	CRFG PC BOARD ASSY	IN	014435	041676	PPF4	N	N
0	A	88889500	DEF	PC	CRFG PC BOARD ASSY	OUT	022129	120141	PPF4	N	N
0	A	88889500	1.00	PC	STIFFENED PC BOARD (CASTING)	IN	014435	041676	PPD4	N	N
0	A	88889500	1.00	PC	STIFFENED PC BOARD (CASTING)	OUT	022129	120141	PPD4	N	N
7	C	88889500	1.00	PC	INSULATOR CARD STIFFENED	IN	014435	041676	PPD4	N	N
7	C	88889500	1.00	PC	INSULATOR CARD STIFFENED	OUT	022129	120141	PPD4	N	N
6	C	88889600	1.00	PC	INSULATOR-CARD FRAME,UPPER	IN	022129	120141	PPD4	N	N
7	C	88889700	1.00	PC	INSULATOR-CARD FRAME,LOWER	IN	022129	120141	PPD4	N	N
2	C	88889600	1.00	PC	FRAME-CARD (CASTING)	IN	022129	120141	PPD4	N	N
12	A	88889700	41.00	PC	CAP-FIXED SOLID TANT,4VDC,12UF	IN	014435	041676	PPD4	N	N
10	A	9203001A	9.00	PC	FYLEFT	IN	022129	120141	PPD4	N	N
1	A	96744224	1.00	PC	PWA-CONTROL NUMBER 2	IN	014435	041676	PPD4	N	N
5	D	96744232	DEF	PC	LOGIC DIAG-CONTROL NO.2 (7EKT)	IN	014435	041676	PPF4	N	N

NUMBER OF LINE ITEMS = 64
HIGHEST FIND NUMBER = 52

SCMD MFG INFO

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Figure 2-7. Control 2 PWA (88909400) (Sheet 2 of 2)

ASSEMBLY PARTS LIST

H8910201		K	A	P	PWA-CPU ARITH FILE 1 (7FLT)	OSW	MP17	04/20/76	022129	07/21/81	
ASSEMBLY NUMBER		REV	CL	REV	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER
PART NUMBER	QTY	UNIT	DESCRIPTION	IN/OUT	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY	FR	RE		
30 C 24501000	4.00	IN	WIDE ELECT SOLID COPPER PA-CA	OUT	022129	120181	PPP1	N			
32 C 24503700	4.00	IN	INSULATION ELIEVING HIGH TEMP	OUT	022129	120181	PPP3	N			
33 A 30166100	DEF	PC	CASE MARKING/LETTERING,PAW	OUT	022129	120181	PFF4	N			
29 A 75009901	2.00	PC	RESISTOR MODULE 1K OHM 2 0/0	IN			PPP4	N			
31 A RA996717	3.00	PC	CEP,CEP 100V 220 PF	IN			PPP4	N			
4 A 00012400	4.00	PC	OLVET GENT THUMBLED,POS, 312 LF	OUT	022129	120181	PPP4	N			
4 A 00075200	1.00	PC	TAB IDENTIFICATION,CARD	OUT	021222	062078	PPP4	N			
7 D 00075500	1.00	PC	ONE OAH (13 IN)	OUT	022129	120181	PPP4	N			
13 A 00001500	4.00	PC	CAP ELECT-ALUM 16VDC 100UF	IN			PPP4	N			
18 A 00011100	32.00	PC	IC 74151A TTL DATA SEL MUX	IN			PPP4	N			
22 A 00012000	2.00	PC	IC 74H00 TTL QUAD 2-INPUT AND	IN			PPP4	N			
17 A 00001600	4.00	PC	IC 74104 TTL 4-BIT DIBID C-DEC	OUT	021131	041478	PPP4	N			
20 A 00002100	1.00	PC	IC 74H00 TTL QUAD 2-1 POS NAND	IN			PPP4	N			
15 A 00002900	14.00	PC	IC 74175 TTL QUAD D F/F W/CLR	IN			PPP4	N			
25 A 00003400	4.00	PC	IC 9300 TTL DUAL 4-INPUT MUX	IN			PPP4	N			
21 A 00004500	1.00	PC	IC 74S00 SCHOTTKY TTL QUAD 2-1	IN			PPP4	N			
16 A 00004800	16.00	PC	IC 74S200 TTL 256 BIT RAM	IN			PPP4	N			
19 A 00004900	4.00	PC	IC 74S191 TTL ALU/FUNCTION GEN	IN			PPP4	N			
24 A 00005000	1.00	PC	IC 74S192 TTL LOOK-AHEAD GEN	IN			PPP4	N			
26 A 00005500	4.00	PC	IC 7402 TTL QUAD NOR GATE	IN			PPP4	N			
23 A 00006100	8.00	PC	IC 7480 TTL 64 BIT RAM	IN			PPP4	N			
14 A 00006600	13.00	PC	IC 74H04 TTL HEX INVERTER	IN			PPP4	N			
5 A 00007600	1.00	PC	LABEL IDENTIFICATION,IMP3	OUT	021222	062078	PPP4	N			
28 A 00008500	2.00	PC	PES NETWORK-14 PIN DIP,510 OHM	IN			PPP4	N			
11 A 00000500	DEF	PC	CORE PC BOARD ASSY	OUT	022129	120181	PFF4	N			
2 D 00005400	1.00	PC	STIFFENER-PC BOARD (CASTING)	OUT	022129	120181	PPP4	N			
3 C 00005500	1.00	PC	INSULATOR-CARD STIFFENER	OUT	022129	120181	PPP4	N			
27 A 00005900	8.00	PC	IC 74S194 TTL 4-BIT SHIFT REG	IN	021131	041478	PPP4	N			
4 C 00006600	1.00	PC	INSULATOR-CARD FRAME,UPPER	IN	022129	120181	PPP4	N			
3 C 00006700	1.00	PC	INSULATOR-CARD FRAME,LOWER	IN	022129	120181	PPP4	N			
2 C 00006800	1.00	PC	FRAME-CARD (CASTING)	IN	022129	120181	PPP4	N			
12 A 00007800	47.00	PC	CAP-FIXED SOLID TANT,4VDC,12UF	IN			PPP4	N			
6 A 02030010	9.00	PC	EYFLET	IN	022129	120181	PPP4	N			
1 A 06744217	1.00	PC	PHW-CPU, ARITHMETIC	IN			PPP4	N			
9 C 96749600	DEF	PC	LOGIC DIAG-ARITH FILE 1 (7FLT)	IN			PFF4	N			

5040

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INTERDISCIPLINARY DOCUMENT

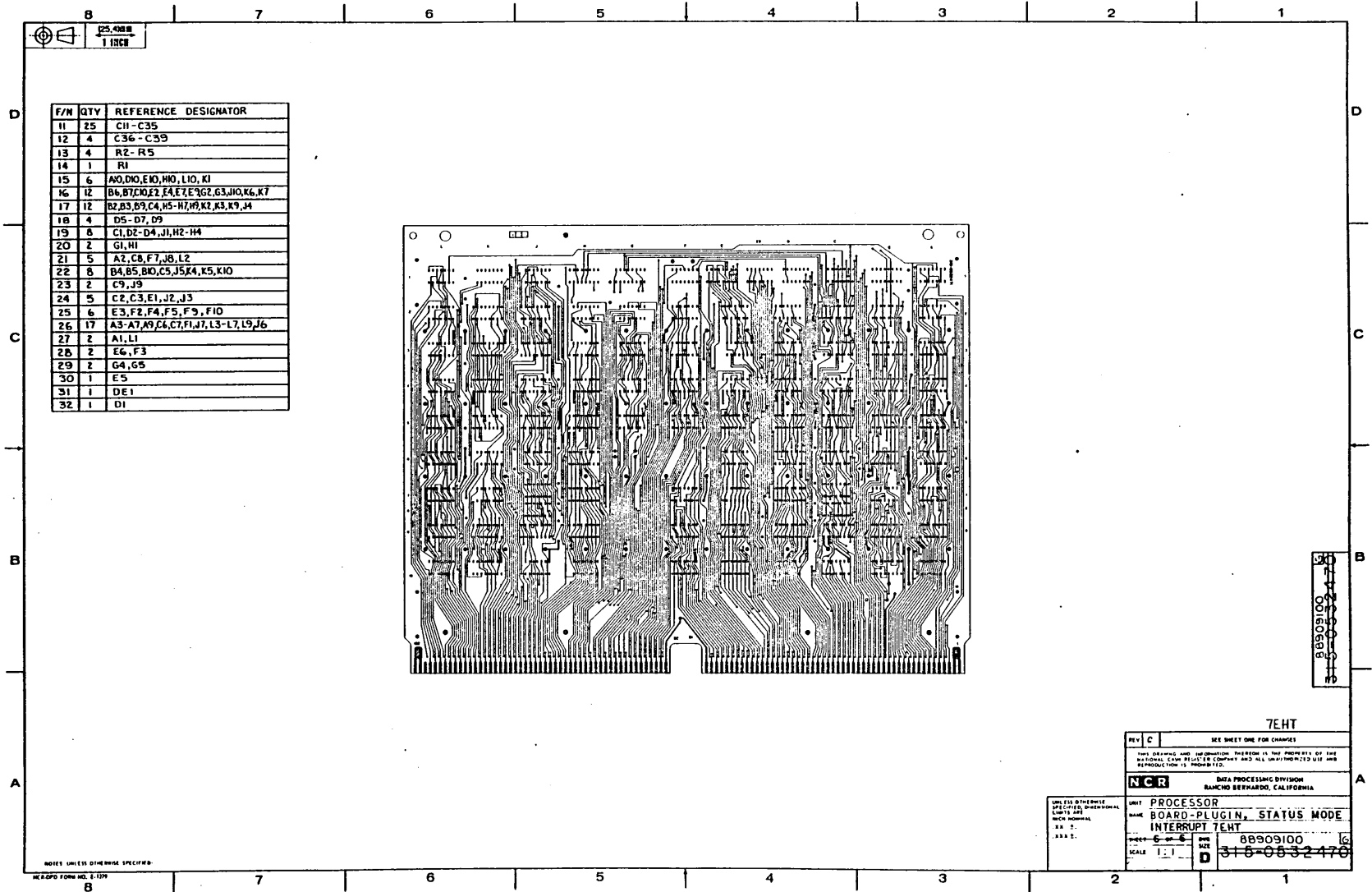
5440
SHEET 2 OF 2

MFG INFO

INTERDISCIPLINARY DOCUMENT

Figure 2-8. Arithmetic Logic Unit (ALU) PWA (88910201) (Sheet 2 of 2)

Figure 2-9. Status Mode Interrupt (SMI) PWA (88909100) (Sheet 2 of 3)



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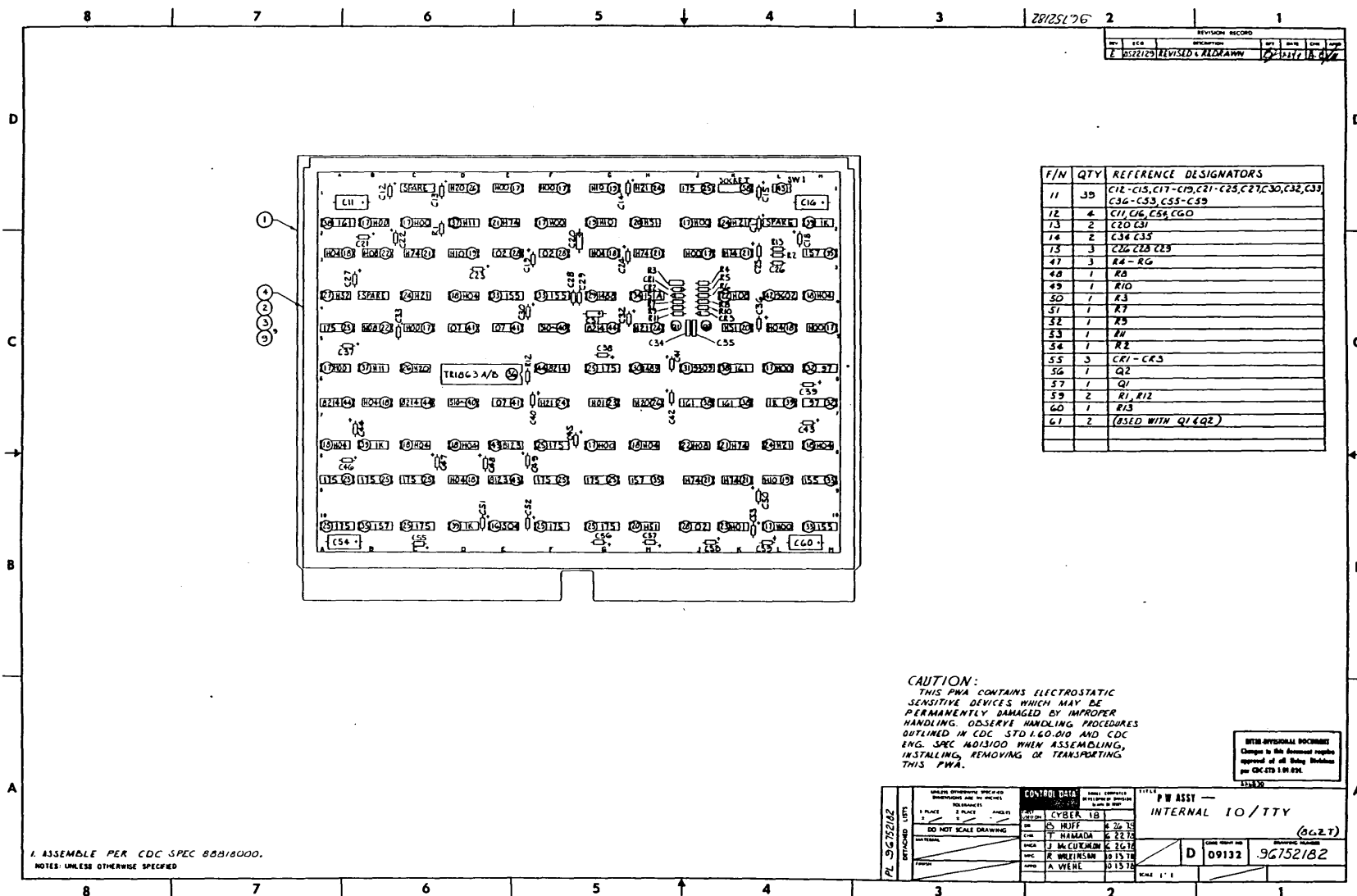
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60475100 A

Figure 2-10. I/O-TTY Controller PWA (96752182) (Sheet 1 of 2)



ASSEMBLY PARTS LIST

96752182	E A D	PWA-INTERNAL,I/O TTY AGZT	DSM	CRR 1A	10/09/78	022129	07/21/81		
ASSEMBLY NUMBER	REV	CL	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	NC	IN
60	C	17705904	1.00	PC	PFS FXD .25W 47000 OHMS	IN			PPP4	N		N
13	C	17706766	2.00	PC	CAP FIXED SOLID TANTALUM 110	IN			PPP4	N		N
51	C	24500043	1.00	PC	PFS FXD .25W 150 OHMS	IN			PPP4	N		N
48	C	24500056	1.00	PC	PFS FXD .25W 510 OHMS	IN			PPP4	N		N
49	C	24500061	1.00	PC	PFS FXD .25W 820 OHMS	IN			PPP4	N		N
59	C	24500063	2.00	PC	PFS FXD .25W 1000 OHMS	IN			PPP4	N		N
47	C	24500072	3.00	PC	PFS FXD .25W 2400 OHMS	IN			PPP4	N		N
54	C	24500079	1.00	PC	PFS FXD .25W 4700 OHMS	IN			PPP4	N		N
53	C	24500080	1.00	PC	PFS FXD .25W 5100 OHMS	IN			PPP4	N		N
52	C	24500087	1.00	PC	PFS FXD .25W 10000 OHMS	IN			PPP4	N		N
50	C	24500163	1.00	PC	PFS FXD COMP .50W 1K OHMS 5PCT	IN			PPP4	N		N
29	A	36184400	1.00	PC	IC CHIP,TYPE 1488	IN			PPP4	N		N
30	A	36184501	1.00	PC	IC CHIP TYPE 1499	IN			PPP4	N		N
57	A	39017400	1.00	PC	TRANSISTOR 2N2210-A	IN			PPP4	N		N
7	A	30154100	DEF	PC	COFF MARKING/LETTERING,INK	OUT	022129	120181	RFF4	N		N
56	A	39380300	1.00	PC	TRANSISTOR-SILICON PNP 2N2905	IN			PPP4	N		N
62	C	52000040	40.00	IN	WIRE CLIP 30 GA WHITE	OUT	022129	120181	PPP1	N		N
39	A	75009901	4.00	PC	RESISTOR MODULE 1K OHM 2 0/0	IN			PPP4	N		N
61	A	84005500	2.00	PC	MTG PAD,TRANSISTOR	IN			PPP4	N		N
15	A	84096719	3.00	PC	CAP,CER 100V 330 PF	IN			PPP4	N		N
0	A	00012400	4.00	PC	DIRECT SEMI TUBULAR DPC 312 LG	OUT	022129	120181	PPP4	N		N
0	A	00075500	5.00	PC	QMS-R10 (13 IN)	OUT	022129	120181	PPP4	N		N
14	A	88880400	2.00	PC	CAP-CERAMIC 50VDC .1HF 20PCT	IN			PPP4	N		N
12	A	88880500	4.00	PC	CAP ELCT-ALUM 16VDC 100UF	IN			PPP4	N		N
32	A	88880600	2.00	PC	IC 7497 TTL 6-PIT BINARY MUX	IN			PPP4	N		N
36	A	88881000	1.00	PC	IC-TTL74A3A/4,UART,MOS/LSI,40PN	IN			PPP4	N		N
34	A	88881100	1.00	PC	IC 74151A TTL DATA SFL MUX	IN			PPP4	N		N
22	A	88881200	4.00	PC	IC 74H00 TTL QUAD 2-INPUT AND	IN			PPP4	N		N
33	A	88881400	4.00	PC	IC 74155 TTL 2/4 DECODER/MUX	IN			PPP4	N		N
44	A	88881700	4.00	PC	IC 8214 TTL DUAL 4/1 MUX	IN			PPP4	N		N
20	A	88882000	3.00	PC	IC 74H51 TTL DUAL 2-WIDE 2-INP	IN			PPP4	N		N
17	A	88882100	13.00	PC	IC 74H00 TTL QUAD 2-1 POS NAND	IN			PPP4	N		N
23	A	88882200	2.00	PC	IC 74H01 TTL QUAD 2-1 POS NAND	IN			PPP4	N		N
37	A	88882300	2.00	PC	IC 74H11 TTL TRIPLE 3-INP AND	IN			PPP4	N		N
24	A	88882400	6.00	PC	IC 74H21 TTL DUAL 4-INPUT AND	IN			PPP4	N		N
27	A	88882500	1.00	PC	IC 74H52 TTL EXPAN 2-2-2-3 INP	IN			PPP4	N		N

SCMD REV 400 MFG INFO

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ASSEMBLY PARTS LIST

967521A2	E	A	D	PWA-INTERNAL,I/O TTY AGZT	DSM	CRR 1A	10/09/78	022129	07/21/81	
ASSEMBLY NUMBER	REV	CL	AS	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PH	NC	IN
26	A	88882600	3.00	PC	IC 74H20 TTL DUAL 4-1 POS NAND	IN			PPP4	N		N
21	A	88882700	7.00	PC	IC 74H74 TTL DUAL D EDGE F/F	IN			PPP4	N		N
25	A	88882900	13.00	PC	IC 74175 TTL QUAD D F/F W/CLR	IN			PPP4	N		N
19	A	88883100	4.00	PC	IC 74H10 TTL TPL 3-1 POS NAND	IN			PPP4	N		N
41	A	88883200	3.00	PC	IC 7407 TTL HEX BUFFER (OC)	IN			PPP4	N		N
31	A	88883400	1.00	PC	IC 9309 TTL DUAL 4-INPUT MUX	IN			PPP4	N		N
16	A	88883700	1.00	PC	IC 74S04 SCHOTTKY TTL HFX INV	IN			PPP4	N		N
28	A	88885500	3.00	PC	IC 7402 TTL QUAD NOR GATE	IN			PPP4	N		N
38	A	88885800	4.00	PC	IC 74161 TTL 4-BIT BINARY CNTR	IN			PPP4	N		N
35	A	88886400	3.00	PC	IC 74157 TTL QUAD 2-INPUT MUX	IN			PPP4	N		N
42	A	88886500	1.00	PC	IC 9602 TTL DUAL MONOSTAB MVB	IN			PPP4	N		N
18	A	88886600	12.00	PC	IC 74H04 TTL HEX INVERTER	IN			PPP4	N		N
40	A	88888500	2.00	PC	PES NETWORK-14 PIN QIP,510 OHM	IN			PPP4	N		N
58	A	88889104	1.00	PC	SOCKET-IC 16 PIN LOW PROFILE	IN			PPP4	N		N
10	A	00000500	RFF	PC	COFF-PC BOARD ASSY	OUT	022129	120181	RFF4	N		N
2	A	00005400	1.00	PC	STIFFENER-PC BOARD (CASTING)	OUT	022129	120181	PPP4	N		N
3	A	00005500	1.00	PC	INSULATOR-CARD STIFFENER	OUT	022129	120181	PPP4	N		N
43	A	88886000	2.00	PC	IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N		N
4	A	88886600	1.00	PC	INSULATOR-CARD FRAME,UPPER	IN	022129	120181	PPP4	N		N
3	A	88886700	1.00	PC	INSULATOR-CARD FRAME,LOWER	IN	022129	120181	PPP4	N		N
2	A	88886800	1.00	PC	FRAME-CARD (CASTING)	IN	022129	120181	PPP4	N		N
55	A	88887100	3.00	PC	DIODE-SILICON SWITCHING	IN			PPP4	N		N
11	A	88887800	39.00	PC	CAP-FIXED SOLID TANT,AVDC,12UF	IN			PPP4	N		N
45	A	88889000	1.00	PC	SWITCH-DUAL IN-LINE 4 POSITION	IN			PPP4	N		N
9	A	92030018	9.00	PC	FYELET	IN	022129	120181	PPP4	N		N
1	A	96744240	1.00	PC	PWA-INTERNAL,I/O TTY (P4)	IN			PPP4	N		N
6	D	96752183	RFF	PC	LOGIC-INTERNAL,I/O TTY 8GZT	IN			RFF4	N		N

NUMBER OF LINE ITEMS = 43
HIGHEST FIND NUMBER = 62

SCMD REV 400 MFG INFO

INTERDIVISIONAL DOCUMENT

Figure 2-10. I/O-TTY Controller PWA (96752182) (Sheet 2 of 2)

Figure 2-11. I/O-TTY Controller PMA (88909701 NCR 315-0536973) (Sheet 1 of 7)

REV.	CHANGE	SR NO.	DFTS	CHECK	APPO	DATE
A	RELEASED TO PRODUCTION.	35-11637	12-23-75	—	—	—
B	F/D & ITEM 60: ADDED W12 THRU W24. F/D: ADDED 4 EXPOSED GROUND PLANE AREAS AND ITEM 61 CALLOUTS ADDED NOTE 9. (DWG OF ASSY "B" REV.)	35-13004	JDI 4-12-76	4-23-76	4-23-76	4-23-76

MO	RFC NO.	PLANT LOC	DESCRIPTION	INTERPLANT USAGE (CODE)	REQD	NEXT ASSEMBLY
					1	315-0529860

MANUFACTURING OPTION FOR USE ONLY AT PLANT SHOWN

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NCR DATA PROCESSING DIVISION
RANCHO BERNARDO, CALIFORNIA

LABS	MODEL	PLANT	CLASS	MODEL	PLANT	CLASS	UNIT
P17	-	MP				MP-17	PROCESSOR
P17	-	35				M.D.I.	BOARD-PLUGIN INTERNAL
							IO/TTY-MINI

DRAWING OF THE ASSEMBLY

SHEET NO. 6 & 7 SIZE: D DESIGNER: D. WALL

REV. A B

APPROVED: 4/24/76

315-0536973

COVER SHEET

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. SR NO.	REMARKS
1	1	A	315-0532525	BOARD-PRINTED		
2	1	D	315-0529100	STIFFENER		
3	1	C	315-0529089	INSULATOR		
4	1	D	315-0523289	TAB-CARD IDENTIFICATION		
5	5	A	315-0526493	BUS BAR (13")		
6	REF	A	315-0531940	PERFORMANCE SPEC		
7	REF	D	315-0532523	SCHEMATIC-LOGIC		
8	REF	A	007-9502002	MARKING-GENERAL		
9	1	A	007-4050321	LABEL-IDENTIFICATION		K21
10	4	A	007-6951204	RIVET-HOLLOW BRASS		
11	REF	A	007-9506300	ASSEMBLY SPEC		
12	17	A	007-1158901	CAPACITOR, 12UF, 6V, +100%, -20% C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C26, C27, C28, C29,		
13	3	A	007-1140415	CAPACITOR, 100UF, 16V, +150%, -10% C36, C37, C38		
14	1	A	007-1158321	CAPACITOR, 10UF, 20V, ±20% C35		
15	2	A	007-1132107	CAPACITOR, 0.1UF, 25V, ±20% C42, C43		
16	3	A	007-1131522	CAPACITOR, 330PF, 100V, ±10% C25, C40, C41		
17	1	A	007-1676301	CIRCUIT-TTL, HEX INVERTER F5		
18	13	A	007-1673601	CIRCUIT-TTL, NAND GATE (QUAD 2-INPUT) A4, B1, C1, D5, F1, F7, G2, J1, J11, L1, L9, L11, M3		
19	12	A	007-1699601	CIRCUIT-TTL, HEX INVERTER A8, A10, C7, D6, E5, E8, G4, G7, K2, M4, M6, M9		
20	6	A	007-1674201	CIRCUIT-TTL, NAND GATE (TRIPLE 3-INPUT) A2, D1, E1, K8, L4, L5		

UNIT	PROCESSOR	REV
NCR	315-0536973	B
NAME: BOARD-PLUGIN INTERNAL		
IO/TTY-MINI	NCR PROPRIETARY	PARTS LIST

Figure 2-11. I/O-TTY Controller PMA (88909701 NCR 315-0536973) (Sheet 2 of 7)

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. EN NO.	REMARKS
21	3	A	007-1673501	CIRCUIT-TTL, AND-OR-INVERT (DUAL, 2-WIDE, 2-INPUT) G1,G6,H1		
22	7	A	007-1673801	CIRCUIT-TTL, D-FLIP-FLOP (DUAL) E2,J2,K1,K5,K6,L6,M1		
23	5	A	007-1672601	CIRCUIT-TTL, NAND GATE (QUAD 2-INPUT) C2,C5,F8,H4,K4		
24	2	A	007-1673605	CIRCUIT-TTL, NAND GATE (QUAD 2-INPUT, OPEN COIL) F2,K10		
25	7	A	007-1673630	CIRCUIT-TTL, AND GATE (DUAL 4-INPUT) B2,C4,D7,H2,H9,J10,M5		
26	13	A	007-1674002	CIRCUIT-TTL, FLIP-FLOP (QUAD D-TYPE) A11,B4,B11,C10,C11,D4, D11,E11,F11,G10,G11, H11,J8		
27	2	A	007-1673701	CIRCUIT-TTL, NAND GATE (DUAL 4-INPUT) C6,E4		
28	1	A	007-1673640	CIRCUIT-TTL, AND-OR-GATE (EXPANDABLE, 4-WIDE) F4		
29	4	A	007-1696201	CIRCUIT-TTL, NOR GATE (QUAD 2-INPUT) J4,J9,L3,M2		
30	1	A	007-1694601	CIRCUIT-INTEGRATED (QUAD LINE DRIVER) G5		
31	1	A	007-1694701	CIRCUIT-INTEGRATED (QUAD LINE RECEIVER) H5		
32	4	A	007-1673201	CIRCUIT-TTL, MULTIPLEXER (3-STATE OUTPUT) A7,B7,J7,K7		
33	2	A	007-1675802	CIRCUIT-TTL, MULTIPLEXER (QUAD, 2-INPUT TRI-STATE) E7,H7		
<						

NCR-OPD E-1201A 11/72

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. EN NO.	REMARKS
34	1	A	007-1675901	CIRCUIT-TTL, MULTIPLEXER (DUAL 4-INPUT) B6		
35	2	A	007-1667601	CIRCUIT-TTL, BINARY MULTIPLEXER (SYNC,6-BIT) L7,L8		
36	4	A	007-1672801	CIRCUIT-TTL, MULTIPLEXER (DUAL 2 TO 4 LINE DECODER) K3,L2,M7,M8		
37	1	A	007-1667615	CIRCUIT-TTL, MULTIPLEXER (DATA SELECTOR) H6		
38	3	A	007-1698001	CIRCUIT-TTL, MULTIPLEXER (QUAD 2-INPUT) B10,H10,M11		
39	1	A	007-1667610	CIRCUIT, DATA INTERFACE (VAR-T) EF6		
40	1	A	007-1673620	CIRCUIT-TTL, AND GATE GATE (TRIPLE 3-INPUT) D2		
41	3	A	007-1697401	CIRCUIT-TTL, COUNTERS (SYNCHRONOUS, 4-BIT) A5,A6,B5		
42	3	A	007-6718308	CIRCUIT, RESISTOR NETWORK C8,G8,M10		
43	1	A	007-1675701	CIRCUIT-TTL, HEX BUFFER (HIGH VOLTAGE O.C.) K11		
44	1	A	007-1698101	CIRCUIT-TTL, DUAL ONE SHOT K9		
45	3	A	007-2502101	DIODE, SILICON SWITCH CR1,CR2,CR3		
46	1	A	006-6020486	RESISTOR, 510 Ω , $\frac{1}{4}$ W, $\pm 5\%$ R20		
47	3	A	006-6020457	RESISTOR, 2.4K $\frac{1}{4}$ W, $\pm 5\%$ R17,R18,R19		
48	1	A	006-6020450	RESISTOR, 150 Ω , $\frac{1}{4}$ W, $\pm 5\%$ R14		
UNIT: PROCESSOR				315-0536973		REV B
NAME: BOARD-PLUGIN INTERNAL						
I/O/TTY-MINI						
NCR PROPRIETARY				PARTS LIST		

NCB-OPD 8-15454 11/79

NCR-OPD E-1201A 11/72

Figure 2-11. I/O-TTY Controller PMA (88909701 NCR 315-0536973) (Sheet 3 of 7)

ITEM	REQD	SIZE	PART NO.	DESCRIPTION	PARTS LIST CHG. ER NO.	REMARKS
49	1	A	006-6020415	RESISTOR, 10K, $\frac{1}{4}$ W, $\pm 5\%$ R15		
50	1	A	006-6020458	RESISTOR, 5.1K, $\frac{1}{4}$ W, $\pm 5\%$ R16		
51	1	A	006-6020423	RESISTOR, 820 Ω , $\frac{1}{4}$ W, $\pm 5\%$ R21		
52	1	A	006-6020012	RESISTOR, 1.0K, $\frac{1}{4}$ W, $\pm 5\%$ R13		
53	13	A	006-6020402	RESISTOR, 1K, $\frac{1}{4}$ W, $\pm 5\%$ R1, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R23, R24		
54	2	A	006-6020463	RESISTOR, 47K, $\frac{1}{4}$ W, $\pm 5\%$ R25, R26		
55	1	A	007-7934304	SWITCH, DUAL IN-LINE L10		
56	1	A	007-7500301	SOCKET, INTEGRATED CIRCUIT (REF A1)		
57	1	A	007-7400501	TRANSISTOR, PNP SI (7-4005) Q1		
58	1	A	007-7465402	TRANSISTOR, NPN SI (7-4654A) Q2		
59	2	A	007-3860501	INSULATOR-TSTR MTG. PAD (REF O1, Q2)		
60	A/R	A	007-9000001	WIRE-ELECTRICAL, INSULATED W1, W2, W3, W4, W5, W6, W7, W8, W9, W10, W11, W12 THRU W24	35-13004	
61	A/R	A	007-8902009	WIRE-ELECTRICAL, SOLID COPPER, 22 AWG W25 THRU W28	35-13004	
UNIT: PROCESSOR				315-0536973		REV
NAME: BOARD-PLUGIN INTERNAL						B
IO/TTY-MINI				NCR PROPRIETARY PARTS LIST		

NCR-DPO E-1201A 11/72

Figure 2-11. I/O-TTY Controller PWA (88909701 NCR 315-0536973) (Sheet 4 of 7)

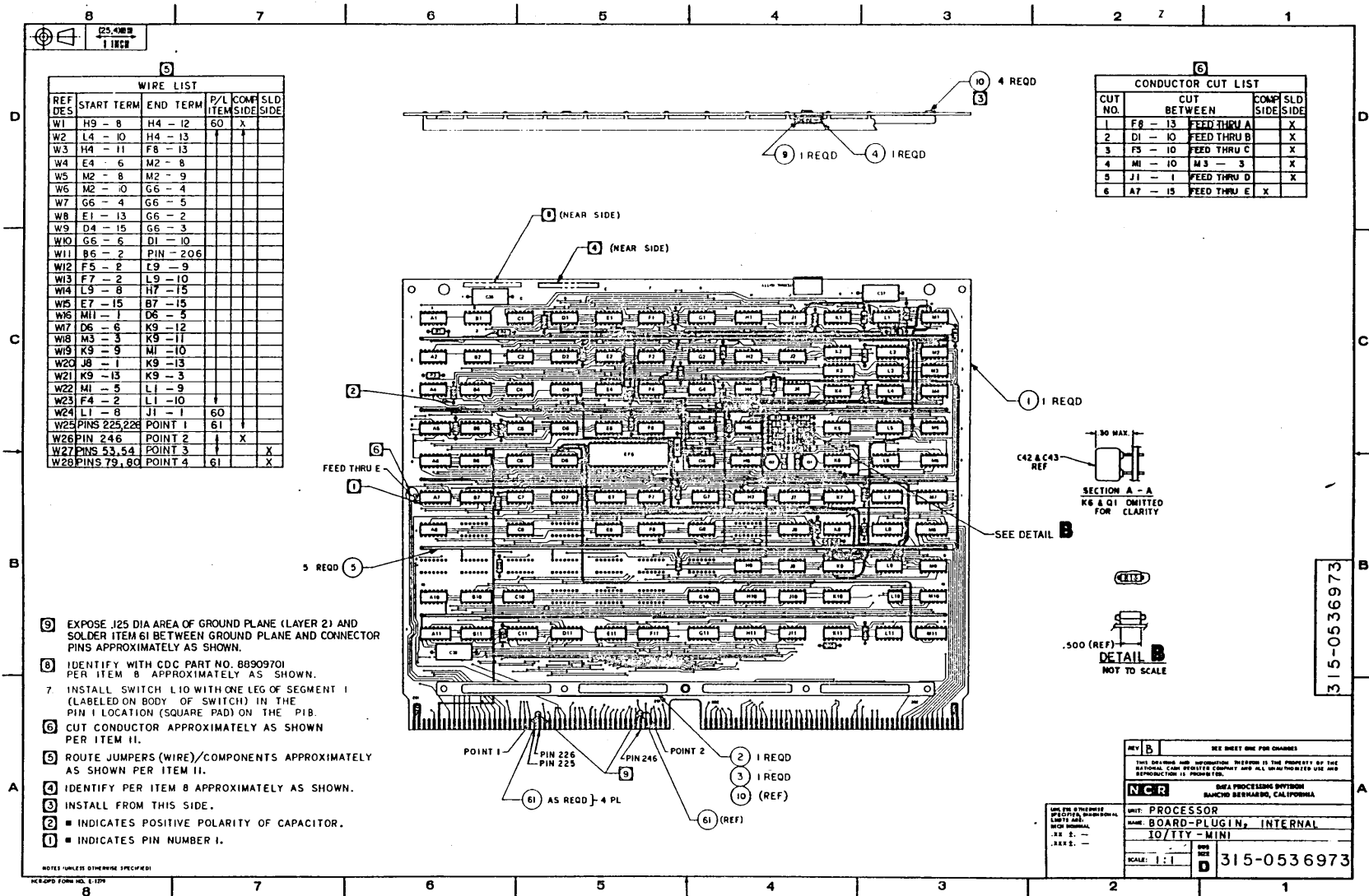
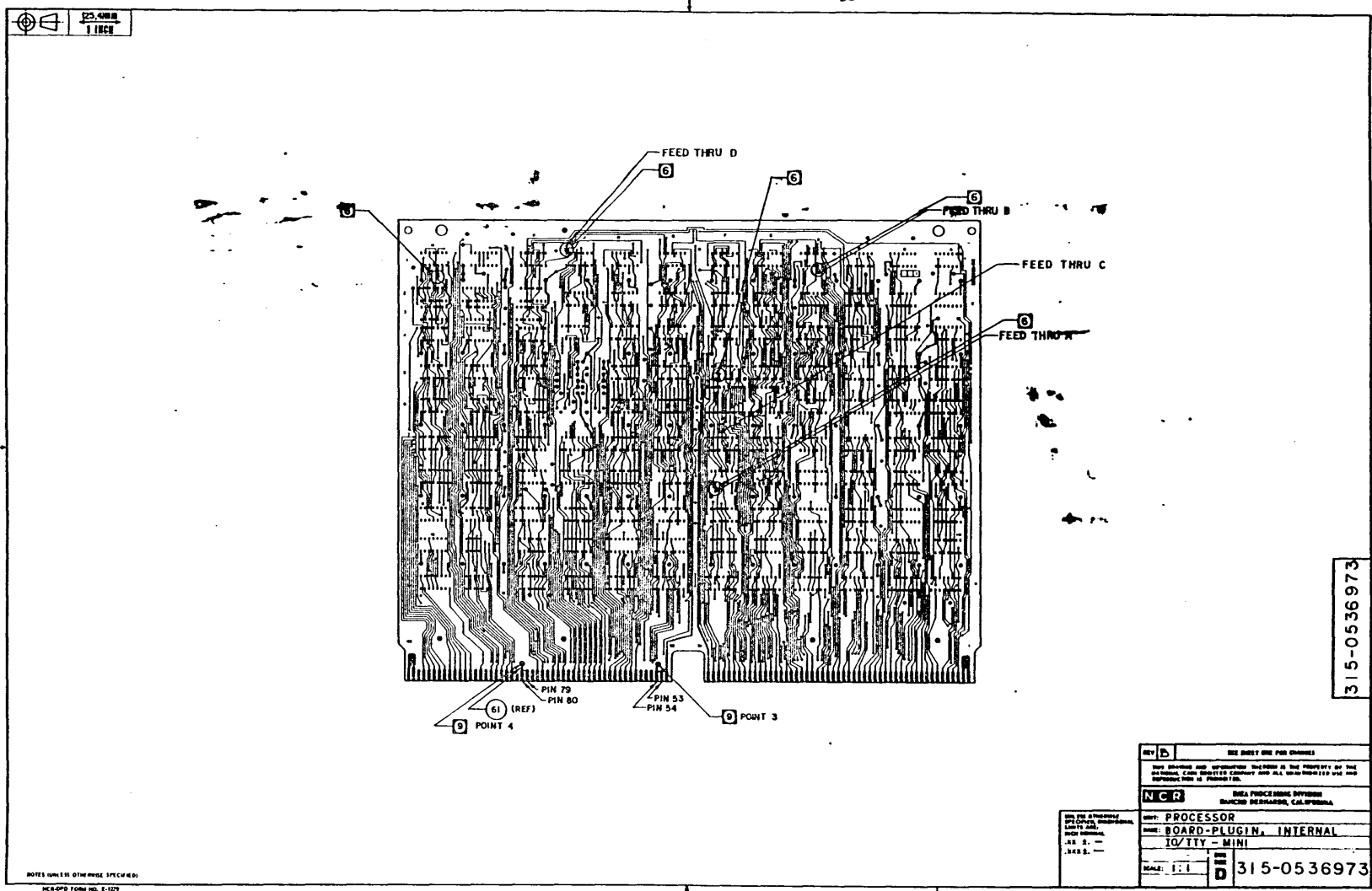


Figure 2-11. I/O-TTY Controller PWA (88909701 NCR 315-0536973) (Sheet 5 of 7)



REVISION RECORD						
REV	CO	DESCRIPTION	DRFT	DATE	CHKD	APP

CDC PART NO.	SAME AS NCR PART NO. W/REVISION LEVEL	NCR REVISION INCLUDES CDC ECR'S & ECO'S NO.
88909700 INACTIVE	315-0532524 E SUPERSEDED BY 88909701	14040, 14091, 14092, 14094 PER ECO 14242
88909701 INACTIVE	315-0536973 A SUPERSEDED BY	14242, 14445 96744241 PER ECO 14572
88909701 INACTIVE	315-0536973 A SUPERSEDED BY	96752182 ECO 21059

INACTIVE

INTER-DIVISIONAL DOCUMENT

This document is subject to change without prior notice. Users will receive copy only of the revised document.

I. RUBBER STAMP PART NUMBER PER ENGINEERING SPECIFICATION 88818000.

<table border="1"> <tr><td>OWN</td><td>J. E. Miller</td><td>7/6/78</td></tr> <tr><td>CHKD</td><td>Guy J. Miller</td><td>7/6/78</td></tr> <tr><td>ENG</td><td>J. E. Miller</td><td>7-26-78</td></tr> <tr><td>MFG</td><td></td><td></td></tr> <tr><td>APP</td><td>E. Miller</td><td>7-26-78</td></tr> </table>	OWN	J. E. Miller	7/6/78	CHKD	Guy J. Miller	7/6/78	ENG	J. E. Miller	7-26-78	MFG			APP	E. Miller	7-26-78	<table border="1"> <tr><td>TITLE</td><td>PWA-I/O TTY (B3)</td></tr> <tr><td>SMALL COMPUTER DEVELOPMENT DIVISION</td><td>14 JUNE, CA 91231</td></tr> <tr><td>SCALE</td><td></td></tr> </table>	TITLE	PWA-I/O TTY (B3)	SMALL COMPUTER DEVELOPMENT DIVISION	14 JUNE, CA 91231	SCALE		<table border="1"> <tr><td>CODE IDENT</td><td>09132</td></tr> <tr><td>DWG No</td><td>A 88909700-01 J</td></tr> </table>	CODE IDENT	09132	DWG No	A 88909700-01 J	
OWN	J. E. Miller	7/6/78																										
CHKD	Guy J. Miller	7/6/78																										
ENG	J. E. Miller	7-26-78																										
MFG																												
APP	E. Miller	7-26-78																										
TITLE	PWA-I/O TTY (B3)																											
SMALL COMPUTER DEVELOPMENT DIVISION	14 JUNE, CA 91231																											
SCALE																												
CODE IDENT	09132																											
DWG No	A 88909700-01 J																											

CD CONTROL DATA CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

ASSEMBLY NUMBER	REV	CLASS	OW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
88909701	J	INA	A	PWA-I/O TTY (B3)	(315-0536973)	DS	MP17	04/20/76	10/11/78

PART NUMBER	QTY	PART NUMBER	QTY	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PN	IN
14 C	17706766	100	PC	CAP FIXED SOLID TANTALUM I10	IN			PPP4	N	
48 C	24500043	100	PC	RES FXD .25W 150 OHMS	IN			PPP4	N	
46 C	24500056	100	PC	RES FXD .25W 510 OHMS	IN			PPP4	N	
51 C	24500061	100	PC	RES FXD .25W 420 OHMS	IN			PPP4	N	
53 C	24500063	1300	PC	RES FXD .25W 1000 OHMS	IN			PPP4	N	
47 C	24500072	300	PC	RES FXD .25W 2400 OHMS	IN			PPP4	N	
50 C	24500090	100	PC	RES FXD .25W 5100 OHMS	IN			PPP4	N	
49 C	24500097	100	PC	RES FXD .25W 10000 OHMS	IN			PPP4	N	
52 C	24500163	100	PC	RES FXD COMP .50W 1K OHMS SPCT	IN			PPP4	N	
54 C	24500257	200	PC	RES FXD .25W 47000 OHMS	IN			PPP4	N	
61 C	24501808	400	IN	WIRE FLECT SOLID COPPER 20 GA	IN			PPP1	N	
30 A	36186400	100	PC	IC CHTP TYPE 1498	IN			PPP4	N	
31 A	36186501	100	PC	IC CHTP TYPE 1498	IN			PPP4	N	
58 A	39017400	100	PC	TRANSISTOR 2N2219-A	IN			PPP4	N	
A	39156102	PEF	PC	SPEC-MARKING/LETTERING, INK	IN			RFF4	N	
57 A	39380300	100	PC	TRANSISTOR-SILICON PNP 2N2905	IN			PPP4	N	
60 C	52629909	1400	IN	WIRE FLECT 30 GA SOLID WHITE	IN			PPP1	N	
42 A	75009901	300	PC	RESISTOR MODULE 1K OHM 2 0/0	IN			PPP4	N	
59 A	84905500	200	PC	MTG PAD, TRANSISTOR	IN			PPP4	N	
16 A	84996719	300	PC	CAP, CF 100V 330 PF	IN			PPP4	N	
10 A	88812400	400	PC	RIVET-SEMI-TUBULAR, RRS .312 LG	IN			PPP4	N	
4 R	88875200	100	PC	TAB-IDENTIFICATION, CARD	IN			PPP4	N	
5 D	88875500	500	PC	BUS BAR (13 IN)	IN			PPP4	N	
15 A	88880400	200	PC	CAP-FIXED CER, 25VDC, .1UF, 20PCT	IN			PPP4	N	
13 A	88880500	300	PC	CAP-FIXED AL, 16VDC, 100UF	IN			PPP4	N	
35 A	88880409	200	PC	IC 7497 TTL 4-BIT BINARY MUX	IN			PPP4	N	
19 A	88881000	100	PC	IC-TM1602A (UART) MOS DATA I/F	IN			PPP4	N	
37 A	88881100	100	PC	IC 74151A TTL DATA SEL MUX	IN			PPP4	N	
23 A	88881200	500	PC	IC 74408 TTL QUAD 2-INPUT AND	IN			PPP4	N	
36 A	88881400	400	PC	IC 74155 TTL 2/4 DECODER/MUX	IN			PPP4	N	
32 A	88881700	400	PC	IC 8214 TTL DUAL 4/1 MUX	IN			PPP4	N	
21 A	88882000	300	PC	IC 74451 TTL DUAL 2-WIDE 2-INP	IN			PPP4	N	
18 A	88882100	1300	PC	IC 74400 TTL QUAD 2-I POS NAND	IN			PPP4	N	
24 A	88882200	200	PC	IC 74401 TTL QUAD 2-I POS NAND	IN			PPP4	N	
40 A	88882300	100	PC	IC 74411 TTL TRIPLE 3-INP AND	IN			PPP4	N	
25 A	88882400	700	PC	IC 74421 TTL DUAL 4-INPUT AND	IN			PPP4	N	

AA 8700-1 REV 7-75

SCMD

Figure 2-11. I/O-TTY Controller PWA (88909701 NCR 315-0536973) (Sheet 6 of 7)

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

88909701	J	INA	A	PWA-I/O TTY (H3)	(315-0536973)	DS	MP17	04/20/76	10/11/78	
ASSEMBLY NUMBER	REV	CLASS	SW	REV	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PC	ON
28	A	88882500	100	PC	IC 74H52 TTL EXPAN 2-2-2-3 INP	IN			PPP4		
27	A	88882600	200	PC	IC 74H20 TTL DUAL 4-1 POS NAND	IN			PPP4		
22	A	88882700	700	PC	IC 74H74 TTL DUAL D EDGE F/F	IN			PPP4		
26	A	88882900	1300	PC	IC 74175 TTL QUAD D F/F W/CLR	IN			PPP4		
20	A	88883100	600	PC	IC 74H10 TTL TPL 3-1 POS NAND	IN			PPP4		
43	A	88883200	100	PC	IC 7407 TTL HEX BUFFER (OC)	IN			PPP4		
34	A	88883400	100	PC	IC 9309 TTL DUAL 4-INPUT MUX	IN			PPP4		
17	A	88883700	100	PC	IC 74S04 SCHOTTKY TTL HEX INV	IN			PPP4		
29	A	88885500	400	PC	IC 7402 TTL QUAD NOR GATE	IN			PPP4		
41	A	88885400	300	PC	IC 74161 TTL 4-BIT BINARY CNTR	IN			PPP4		
38	A	88886400	300	PC	IC 74157 TTL QUAD 2-INPUT MUX	IN			PPP4		
44	A	88886500	100	PC	IC 9602 TTL DUAL MONOSTAB MVB	IN			PPP4		
19	A	88886600	1200	PC	IC 74H04 TTL HEX INVERTER	IN			PPP4		
9	A	88887601	100	PC	LABEL-IDENTIFICATION,K21	IN			PPP4		
56	A	88889101	100	PC	SOCKET-IC 14 PIN,LOW PROFILE	IN			PPP4		
11	A	88889500	REF	PC	SPEC-PC BOARD ASSY	IN			RFE4		
2	D	888895400	100	PC	STIFFENER-PC BOARD (CASTING)	IN			PPP4		
3	C	888895500	100	PC	INSULATOR-CARD STIFFENER	IN			PPP4		
33	A	888896000	200	PC	IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4		
45	A	888897100	700	PC	DIODE-SILICON SWITCHING	IN			PPP4		
12	A	888897400	1700	PC	CAP-FIXED SOLID TANT,6VDC,12UF	IN			PPP4		
55	A	888899000	100	PC	SWITCH-DUAL IN-LINE 4 POSITION	IN			PPP4		
1	A	96744218	100	PC	PWB-INTERNAL,I/O TTY,MINI	IN			PPP4		
7	A	96749800	REF	PC	LOGIC-I/O TTY MINI(315-0536979)	IN			RFE4		

INACTIVE

NUMBER OF LINE ITEMS = 60
 HIGHEST FIND NUMBER = 61

INACTIVE

NUMBER OF LINE ITEMS = 60
HIGHEST FIND NUMBER = 61

AA 8700-1 REV 7-76

PROJECT ENGINEER

SCMD

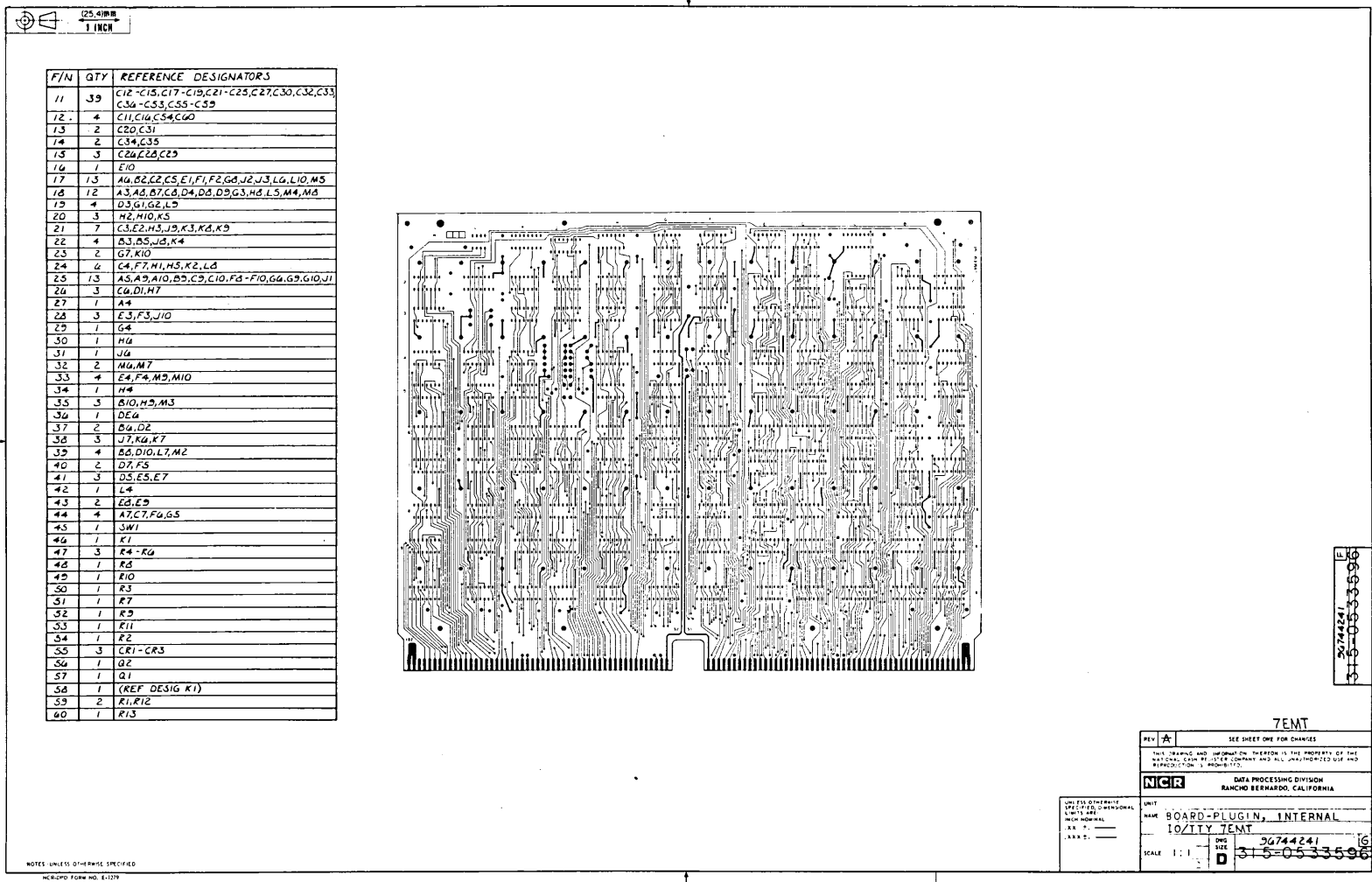
DWN	CHKD	ENG	MFG	APPD	TITLE	PWA-I/O TTY	PREFIX	DOCUMENT NO.	REV
					FIRST USED ON	MP 17	PL	88909700-01	J
LA JOLLA DIVISION 10000 JOLLA BLVD SAN DIEGO, CA 92161 CODE IDENT 09132									
SHEET REVISION STATUS					REVISION RECORD				
REV	ECO	DESCRIPTION	DRPT	DATE	APP				
01		CL. B. PRE-RELEASED	LVP	7-26-74	E. L.				
02	14040	CHG'D REV. TO "B"	LVP	9-13-74	E. L.				
C	14091	CHG'D. NCR BD. REV TO C; RELEASED CL. A, REV C	LVP	1-16-75	E. L.				
D	14092	CHG'D. NCR BD. REV. TO D	LVP	1-20-75	E. L.				
E	14094	CHG'D. NCR BD. REV. TO E	LVP	1-20-75	E. L.				
F	14242	INACTIVATED -OO, SUPERCD. BY -OI.	LVP	11-17-75	E. L.				
G	14445	ADDED PL FOR -OI.	J.M.	4-21-76	E. L.				
H	14572	INACTIVE SERVICE USE ONLY SUPERSEDED BY 967442241	BR	9-7-76	E. L.				
J	DS 21059	SUPERSEDED BY 96752182	BR	10-13-78	AW				
NOTES:									
DETACHED LISTS									

AA8100 REV. 0/71

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Figure 2-11. I/O-TTY Controller PWA (88909701 NCR 315-0536973) (Sheet 7 of 7)

Figure 2-12. I/O-TTY Controller PMA (96744241) (Sheet 2 of 4)



DWN	5-2-76	CONTROL DATA	TITLE	PWA INTERNAL I/O TTY TEMT	PREFIX	DOCUMENT NO.	REV
CHKD	6-2-76	DATA SYSTEMS	FIRST USED ON	MP17	DR	96744241	G
ENG	7-2-76	LAJOLLA DIVISION					
MFG	6-4-76	CODE IDENT					
APPR		09132					

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP										
D	DS14862	P/L CHANGE	DSS	7-26-77	AWJ										
E	DS21222	REMOVED F/N 41B	TL	6-30-78	AW										
F	DS21235	SEE ECO	JSH	7-14-78	RW										
G	DS21059	INACTIVE	BR	10-13-78	RW										

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

NOTES:

DETACHED LISTS

DWN	5-2-76	CONTROL DATA	TITLE	PWA - INTERNAL I/O TTY TEMT	PREFIX	DOCUMENT NO.	REV
CHKD	6-2-76	DATA SYSTEMS	FIRST USED ON	MP 17	PL	96744241	G
ENG	7-2-76	LAJOLLA DIVISION					
MFG	6-4-76	CODE IDENT					
APPR		09132					

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION	DRFT	DATE	APP										
A	18403	CL. A. RELEASED	JM	6-9-76	EL										
B	14654	DELETE 88889101, F/N 5B WAS 88889103	LVP	10-8-76	A.W.										
C	14704	ADDED FN 61. FN 50 WAS 24500073.	TC	11-11-76	EL										
D	DS14862	F/N 36 WAS TR1602B	DSS	7-26-77	AWJ										
E	DS21222	REMOVED F/N 41B	TL	6-30-78	AW										
F	DS21235	SEE ECO	JSH	7-14-78	RW										
G	DS21059	INACTIVE	BR												

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

NOTES:

DETACHED LISTS

Figure 2-12. I/O-TTY Controller PWA (96744241) (Sheet 3 of 4)

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

96744241				G	INA	D	PWA-INTERNAL I/O TTY (7EMT)		DSM	MP17	06/07/76	10/09/78	
ASSEMBLY NUMBER		REV	CLASS	SW	ASSEMBLY DESCRIPTION				DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION				IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PN NC
60	C	17705904	100	PC	RES FXD .25W 47000 OHMS				IN			PPP4	
13	C	17706766	200	PC	CAP FIXED SOLID TANTALUM 110				IN			PPP4	
51	C	24500043	100	PC	RES FXD .25W 150 OHMS				IN			PPP4	
48	C	24500056	100	PC	RES FXD .25W 510 OHMS				IN			PPP4	
49	C	24500061	100	PC	RES FXD .25W 420 OHMS				IN			PPP4	
59	C	24500063	200	PC	RES FXD .25W 1000 OHMS				IN			PPP4	
47	C	24500072	300	PC	RES FXD .25W 2400 OHMS				IN			PPP4	
50	C	24500073	100	PC	RES FXD .25W 2700 OHMS				OUT	014704	101476	PPP4	
54	C	24500079	100	PC	RES FXD .25W 4700 OHMS				IN			PPP4	
53	C	24500080	100	PC	RES FXD .25W 5100 OHMS				IN			PPP4	
52	C	24500087	100	PC	RES FXD .25W 10000 OHMS				IN			PPP4	
50	C	24500163	100	PC	RES FXD COMP .500 1K OHMS SPCT				IN	014704	101476	PPP4	
29	A	36186400	100	PC	IC CHIP TYPE 144A				IN			PPP4	
30	A	36186401	100	PC	IC CHIP TYPE 144B				IN			PPP4	
57	A	39017400	100	PC	TRANSISTOR 2N2219-A				IN			PPP4	
7	A	39156102	RFF	PC	SPEC-MARKING/LETTERING INK				IN			RFE4	
56	A	39380300	100	PC	TRANSISTOR-SILICON PNP 2N2905				IN			PPP4	
39	A	75009901	400	PC	RESISTOR 1000 1K OHM 2 0/0				IN			PPP4	
61	A	84905500	200	PC	MTG PAD TRANSISTOR				IN	014704	101476	PPP4	
15	A	84996719	300	PC	CAP-CER 100V 330 PF				IN			PPP4	
9	A	88812400	400	PC	RIVET-SFMI-TUBULAR .035 .312 LG				IN			PPP4	
4	D	88875200	100	PC	TAP IDENTIFICATION, GALV				OUT	021222	062076	PPP4	
5	D	88875500	500	PC	AUS HAR (13 IN)				IN			PPP4	
14	A	888P9400	200	PC	CAP-FIXED CER .25VDC .1UF 20PCT				IN			PPP4	
12	A	888A0500	400	PC	CAP-FIXED AL .16VDC 100UF				IN			PPP4	
32	A	888A0600	200	PC	IC 7497 TTL 4-BIT BINARY MIX				IN			PPP4	
36	A	888A1000	100	PC	IC-TR1602A (UART) MOS DATA I/F				IN			PPP4	
34	A	888A1100	100	PC	IC 74151A TTL DATA SEL MIX				IN			PPP4	
22	A	888A1700	400	PC	IC 74H04 TTL DUAL 2-INPUT AND				IN			PPP4	
33	A	888A1400	400	PC	IC 74155 TTL 2/4 DECODER/MIX				IN			PPP4	
44	A	888A1700	400	PC	IC 4214 TTL DUAL 4/1 MUX				IN			PPP4	
20	A	888A2000	300	PC	IC 74H51 TTL DUAL 2-VLINE 2-IMP				IN			PPP4	
17	A	888A2100	1300	PC	IC 74H00 TTL DUAL 2-1 POS NAND				IN			PPP4	
23	A	888A2200	200	PC	IC 74H01 TTL DUAL 2-1 POS NAND				IN			PPP4	
37	A	888A2300	200	PC	IC 74H11 TTL TRIPLE 3-IMP AND				IN			PPP4	
24	A	888A2400	600	PC	IC 74H21 TTL DUAL 4-INPUT AND				IN			PPP4	

INACTIVE

AA 2709-1 REV 7.75

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INTERDIVISIONAL DOCUMENT

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

96744241	G	INA	D	PWA-INTERNAL I/O TTY (7EMT)	DSM	MP17	06/07/76	10/09/78		
ASSEMBLY NUMBER	REV	CLASS	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER	
FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PN NC
27	A	888A2500	100	PC	IC 74H52 TTL EXPAN 2-2-2-3 INP	IN			PPP4	N
26	A	888A2600	300	PC	IC 74H20 TTL DUAL 4-1 POS NAND	IN			PPP4	N
21	A	888A2700	700	PC	IC 74H74 TTL DUAL D EDGE F/F	IN			PPP4	N
25	A	888A2900	1300	PC	IC 74174 TTL DUAL D F/F W/CLR	IN			PPP4	N
19	A	888A3100	400	PC	IC 74H10 TTL TPL 3-1 POS NAND	IN			PPP4	N
41	A	888A3200	300	PC	IC 7407 TTL HEX BUFFER (OC)	IN			PPP4	N
31	A	888A3400	100	PC	IC 9309 TTL DUAL 4-INPUT MUX	IN			PPP4	N
16	A	888A3700	100	PC	IC 74S04 SCHOTTKY TTL HEX INV	IN			PPP4	N
28	A	888A5500	300	PC	IC 7402 TTL DUAL NOR GATE	IN			PPP4	N
38	A	888A5800	300	PC	IC 74161 TTL 4-BIT BINARY CNTR	IN			PPP4	N
35	A	888A6400	300	PC	IC 74157 TTL DUAL 2-INPUT MUX	IN			PPP4	N
42	A	888A6500	100	PC	IC 9407 TTL DUAL MONOSTAB MVB	IN			PPP4	N
18	A	888A6600	1200	PC	IC 74H04 TTL HEX INVERTER	IN			PPP4	N
6	A	888A7601	100	PC	LABEL IDENTIFICATION, K01	OUT	021222	062076	PPP4	N
40	A	888A8500	200	PC	RES NETWORK-14 PIN DIP, 510 OHM	IN			PPP4	N
46	A	888A9101	100	PC	SOCKET-IC 14 PIN, LOW PROFILE	OUT	014654	092176	PPP4	N
58	A	888A9103	100	PC	SOCKET-IC 16 PIN	OUT	014654	092176	PPP4	N
58	A	888A9104	100	PC	SOCKET-IC 16 PIN LOW PROFILE	IN	014654	092176	PPP4	N
10	A	888A9500	HEF	PC	SPEC-PC BOARD ASSY	IN			RFE4	N
2	D	888A9500	100	PC	STIFFENER-PC BOARD (CASTING)	IN			PPP4	N
3	C	888A9500	100	PC	INSULATOR-CARD STIFFENER	IN			PPP4	N
43	A	888A9600	200	PC	IC 8123 TTL TRI-STATE 2-IN MUX	IN			PPP4	N
55	A	888A97100	300	PC	DIODE-SILICON SWITCHING	IN			PPP4	N
11	A	888A97800	300	PC	CAP-FIXED SOLID TANT, .6VDC, .12UF	IN			PPP4	N
45	A	888A99000	100	PC	SWITCH-DUAL IN-LINE 4 POSITION	IN			PPP4	N
1	A	96744240	100	PC	PWB-INTERNAL I/O TTY (R4)	IN			PPP4	N
6	D	96744242	RFF	PC	LOGIC DIAG-INTN I/O TTY (7EMT)	IN			RFE4	N

INACTIVE

NUMBER OF LINE ITEMS = 63
HIGHEST FIND NUMBER = 61

INACTIVE

NUMBER OF LINE ITEMS = 63
HIGHEST FIND NUMBER = 61

AA 2709-1 REV 7.75

SCMD

INTERDIVISIONAL DOCUMENT

Figure 2-12. I/O-TTY Controller PWA (96744241) (Sheet 4 of 4)

Table 3-1 is a listing of major components which comprise the basic processor. General descriptions, operation, and theory of operation for the basic processor are contained in publication number 39451400. Only the assembly drawings and logic diagrams are contained in this manual. Some components included as part of the basic processor are documented in separate manuals.

In attempting to locate maintenance data for a specific item, locate the eight-digit part number in the table. Read across to identify the manual which contains the appropriate information. Refer to the drawings in this section for component nomenclature. Numeric codes within the table indicate the section of this manual containing the applicable drawings. Alpha codes indicate other manuals containing the applicable drawings and maintenance information. Items coded X contain no useful field support information, have no

additional maintenance documentation and are included in the list only to maintain continuity of the drawings in this section. The codes within the table are keyed to the following sections or publications. Refer to the preface for the complete publication title.

- 2. Section 2 of this manual
- 3. Section 3 of this manual
- 4. Section 4 of this manual
- 5. Section 5 of this manual
- A. Publication 96768800
- B. Publication 96767900
- C. Publication 96768600
- D. Publication 96768280
- E. Publication 96729000
- F. Publication 96768610
- G. Publication 74834769
- X. Drawing has no significant field support information.

TABLE 3-1. PROCESSOR ASSEMBLY CORRELATION

CDC Part Number	AA132-A	AA132-B	AA132-C	AA132-D	AA133-A	AA133-B	AA153-A	AA155-B
Basic Processor Logic Printed Wiring Assemblies								
88909100	2	2	2	2	2	2	2	2
88909400	2	2	2	2	2	2	2	2
88909701	2							
88910201	2	2	2	2	2	2	2	2
96720404	2	2	2	2	2	2	2	2
96735700		2	2			2		
96744241	2	2	2		2	2		
96751017	2	2	2		2	2		
96752114	2	2	2	2	2	2	2	2
96752182	2	2	2	2	2	2	2	2
96752604		2	2			2		
96837727		2	2			2		

TABLE 3-1. PROCESSOR ASSEMBLY CORRELATION (Contd)

CDC Part Number	AA132-A	AA132-B	AA132-C	AA132-D	AA133-A	AA133-B	AA153-A	AA155-B
Optional Processor and Peripheral Subsystem Printed Wiring Assemblies								
88878500					E			
88879721					E			
88894000					B			
96738801	C	C	C	C	C	C	C	C
96742600	B				B	B	B	
96743702	C	C	C	C	C	C	C	C
96743703	C	C	C	C	C	C	C	C
96752104				C	C	C	C	C
96752111	A	A	A				A	
96752170				C	C	C	C	C
96752173				C	C	C	C	C
96752176					E			
96753848	A	A						
96870860	A	A	A	A			A	A
96890065				C	C	C	C	C
96890551				C	C	C	C	C
96890630				C	C	C	C	C
Basic Processor Structural Assemblies								
75744052	G	G	G	G			G	G
83813003					X	X		
88801351							D	
88889800					X	X		
88894300					D			
88894400					D			
88910300	3				3			
88912000	X	X	X	X	X	X	X	
88914100					X			
88916120	X	X	X	X	X	X	X	
88916122	X	X	X	X	X	X	X	
88916500					3			
88951487			D	D			D	D
88951492	D	D	D	D			D	D
88951802				D				
88951804				D				
88951805				D				
88951806				D				
88951807				3				
88984800		D				D		
94689900	D	D			D	D		
96720752							3	
96720760				3			3	3
96720761							3	
96720762							D	D

TABLE 3-1. PROCESSOR ASSEMBLY CORRELATION (Contd)

CDC Part Number	AA132-A	AA132-B	AA132-C	AA132-D	AA133-A	AA133-B	AA153-A	AA155-B
Basic Processor Structural Assemblies (Contd)								
96720763							D	D
96720764							D	
96720765							D	
96720766							D	D
96720768							D	D
96720770							D	
96721387								4
96721392								4
96729501				D				
96743737	D	D			D	D		
96743744					D	D		
96743830	X	X	X	X	X	X	X	X
96743927								D
96743929								D
96743930								D
96743931								3
96743932								D
96744812	X	X			X	X		
96744876					D	D	D	D
96744885					4	4	4	
96744886					4	4	4	
96744887					4	4	4	4
96744891					D	D	D	D
96744892					D	D	D	D
96746000		X	X	X	X	X	X	
96749703					X			
96749704		X	X	X	X	X	X	X
96749706					3			
96749709					3			
96749711					5	5	5	
96749712					3	3	3	
96750073	X				X			
96750229	D	D	D	D			D	D
96750773	D	D	D	D				
96750774					D	D		
96750798		5	5	5		5	5	5
96750799		3	3	3		3	3	3
96750989		X	X	X	X	X	X	
96751124						3		
96751130		4	4	4		4	4	4
96751131		4	4	4		4	4	4
96751156			D					
96751180		3	3	3	3	3	3	3
96751189			D	D			D	D
96751419		3	3			3		

TABLE 3-1. PROCESSOR ASSEMBLY CORRELATION (Contd)

CDC Part Number	AA132-A	AA132-B	AA132-C	AA132-D	AA133-A	AA133-B	AA153-A	AA155-B
Basic Processor Structural Assemblies (Contd)								
96751652		D				D		
96751656								
96751897					3			
96752000	3				3			
96752068			D	D			D	D
96752286							X	X
96752300	X				X			
96752364			D					
96752367			D	D				
96752526			D	D				
96752815		D	D	D			D	D
96753150	D	D	D					
96753318	5				5			
96753485	D	D	D	D			D	D
96753600					F	F	F	
96753601					F	F	F	
96753704	D	D			D	D		
96753728								4
96753729								4
96753752	D	D	D	D				
96753931	D	D						
96753932	D	D			D	D	D	D
96753933	D	D			D	D	D	D
96753935							X	X
96753950					D	D	D	D
96754213	D	D			D	D		
96754376	D	D		D				
96754387	D	D	D		D	D		
96754391	D				D	D	D	D
96754392					D	D	D	D
96754393					D	D	D	D
96754522	D	D			D	D		
96754811	D	D			D	D		
96754811	X	X	X	X	X	X	X	
96754830	D							
96754831	D							
96754832	D							
96754850			D	D			D	D
96756827	D							
96756830		D	D	D				
96756831		D	D	D			D	D
96756832		D	D				D	
96756842	X	X			X			
96756845	D		D	D				
96756848					D	D		
96756853					D			
96756866							D	D
96762000					4	4	4	

REVISION RECORD							
REV	CO	DESCRIPTION	DRFT	DATE	CHKD	APP	

NOTES:

1. OPTIONAL ADD-ON EQUIPMENTS THAT ARE NOT SUPPLIED AS PART OF THE BASIC PROCESSOR.

2.

3. OPTIONAL ADD-ON EQUIPMENT SLOTS-EQUIPMENT TYPES UNASSIGNED.

4. RESERVED FOR FUTURE PERIPHERAL CONTROLLER DESIGNS. POWER INPUTS ARE +5 VDC AND +12 VDC.

INACTIVE

DWN	L. P. Pichler	1-876	CONTROL DATA	TITLE	BASIC MOS MP17 PROCESSOR		
CHKD	W. J. J. J.	1-876	SMALL COMPUTER DEVELOPMENT DIVISION La Jolla, CA 92037	CODE IDENT	09132	DWG No	96752000
ENG	W. J. J. J.	1-876		A	L		
MFG							
APP	E. J. J.	1-876					

CONTROL DATA	LA JOLLA SYSTEMS DIVISION La Jolla, Calif. 92037	CODE IDENT 09132	DOCUMENT NO. 96752000	REV K
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AC	Z	Y	X	W	V	U	T	S	R	P	N	M	L	K	J	H	G	F	E	D	C	B	A	AA	AB	
AT275-B/AT241-B OR D123-B	AT275-B/AT241-B	AT275-B/AT241-B	AT275-B/AT241-B	AT275-B/AT241-B	BA212-A	FC402-A	BA209-A/BA210-B	BA209-A/BA210-B			BASIC	PROCESSOR			FH301-A	GB138-A		FJ441-A	FA104-A/FA730-A				FA730-A	AT352-A	FA107-A	
128K MOS MEM ARRAY OR ECC MEM	128K MOS MEM	128K MOS MEM	128K MOS MEM	128K MOS MEM	MOS MEM INTERFACE ADDRESS	BREAKPOINT CONT	512W/2K W READ/ WRITE MICRO MEM	512W/2K W READ/ WRITE MICRO MEM	1700 TRANSFORM W/ROM	CONTROL 1	CONTROL 2	ALU W/FILE 1	SMT	I/O TTY INTERFACE	(AQ) CR/LP CONT	(AQ - DMA) SMD ADAP	(AQ - DMA)	(AQ) DCCLA CONT	(AQ) CAS3 TAPE CONT FDD ADAPTER	(AQ - DMA)	(AQ)	(OPEN - UNWIRED)	(AQ - DMA) FDD ADAP	(AQ) IOM ADAPTER	(SET/JAM) LCTY NREI CONT	

PROCESSOR CARD PLACEMENT CPU I

Figure 3-1. AA132-A, AA133-A Basic MOS Processor (Sheet 1 of 2)

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

96752000				L	INA	A	BASIC MOS MP17 PROCESSOR			DS	AR113A	04/19/76	08/27/79			
ASSEMBLY NUMBER		REV	CLASS	ON SI	ASSEMBLY DESCRIPTION					DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER		
FIND NUMBER	DN SI	PART NUMBER		QUANTITY	UNIT MEAS.	PART DESCRIPTION					IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	SPARE NC	
6	D	88909100		100	PC	PWA-STATUS MODE INTERRUPT (7EHT)					IN				AYP4	
4	D	88909400		100	PC	PWA-CONTROL NO.2 (7EKT)					IN				AYP4	
3	D	88909800		100	PC	PWA-CONTROL NO. 1					OUT	014700	05-16-77	AYP4		
4	A	88909701		100	PC	PWA-1700 TTY (753) (915-0530973)					OUT	014572	10-11-76	AYP4		
5	D	88910201		100	PC	PWA-CPU ARITH FILE 1 (7ELT)					IN				AYP4	
2	A	96720404		100	PC	PWA-1700 XFORM W/BCD 8KFT					IN	021707	08-27-79	AYP4		
7	D	96744241		100	PC	PWA-INTERNAL I/O TTY (7EHT)					IN	014572	10-11-76	AYP4		
7	D	96744241		100	PC	PWA-INTERNAL I/O TTY (7EHT)					OUT	021059	11-03-78	AYP4		
3	D	96751017		100	PC	PWA-CONTROL NO.1 TEST					IN	014950	09-16-77	AYP4		
3	D	96751017		100	PC	PWA-CONTROL NO.1 TEST					OUT	021076	09-16-77	AYP4		
2	D	96751046		100	PC	PWA-1700 TRANSFORM W/ROM 7FOT					IN	014951	09-16-77	AYP4		
2	D	96751046		100	PC	PWA-1700 TRANSFORM W/ROM 7FOT					OUT	021004	02-13-78	AYP4		
3	D	96752114		100	PC	PWA-CONTROL NO.1 7FZT					IN	021076	09-16-77	AYP4		
7	D	96752182		100	PC	PWA-INTERNAL I/O TTY 8GZT					IN	021059	11-03-78	AYP4		
1	A	96752300		100	PC	CABINET ASSY-MOS MEM BASIC					IN				KYMA	
2	D	96752601		100	PC	PWA-1700 TRANSFORM W/ROM 8WET					IN	021084	03-17-78	AYP4		
2	D	96752601		100	PC	PWA-1700 TRANSFORM W/ROM 8WET					OUT	021702	08-27-79	AYP4		
3	D	96753003		100	PC	PWA-1700 TRANSFORM W/ROM 660T					OUT	014761	07-11-77	AYP4		
3	D	96753003		100	PC	PWA-CONTROL NO.1 68NT					IN	014704	05-16-77	AYP4		
3	D	96753003		100	PC	PWA-CONTROL NO.1 68NT					OUT	014950	09-16-77	AYP4		
3	D	96753003		100	PC	PWA-1700 TRANSFORM ROM 660T					IN	014761	07-11-77	AYP4		
3	D	96753003		100	PC	PWA-1700 TRANSFORM ROM 660T					OUT	014951	09-16-77	AYP4		
NUMBER OF LINE ITEMS = 22																
HIGHEST FIND NUMBER = 7																

NUMBER OF LINE ITEMS = 22
HIGHEST FIND NUMBER = 7

AA 2708-1 REV 7-75

PROJECT ENGINEER

SCMD

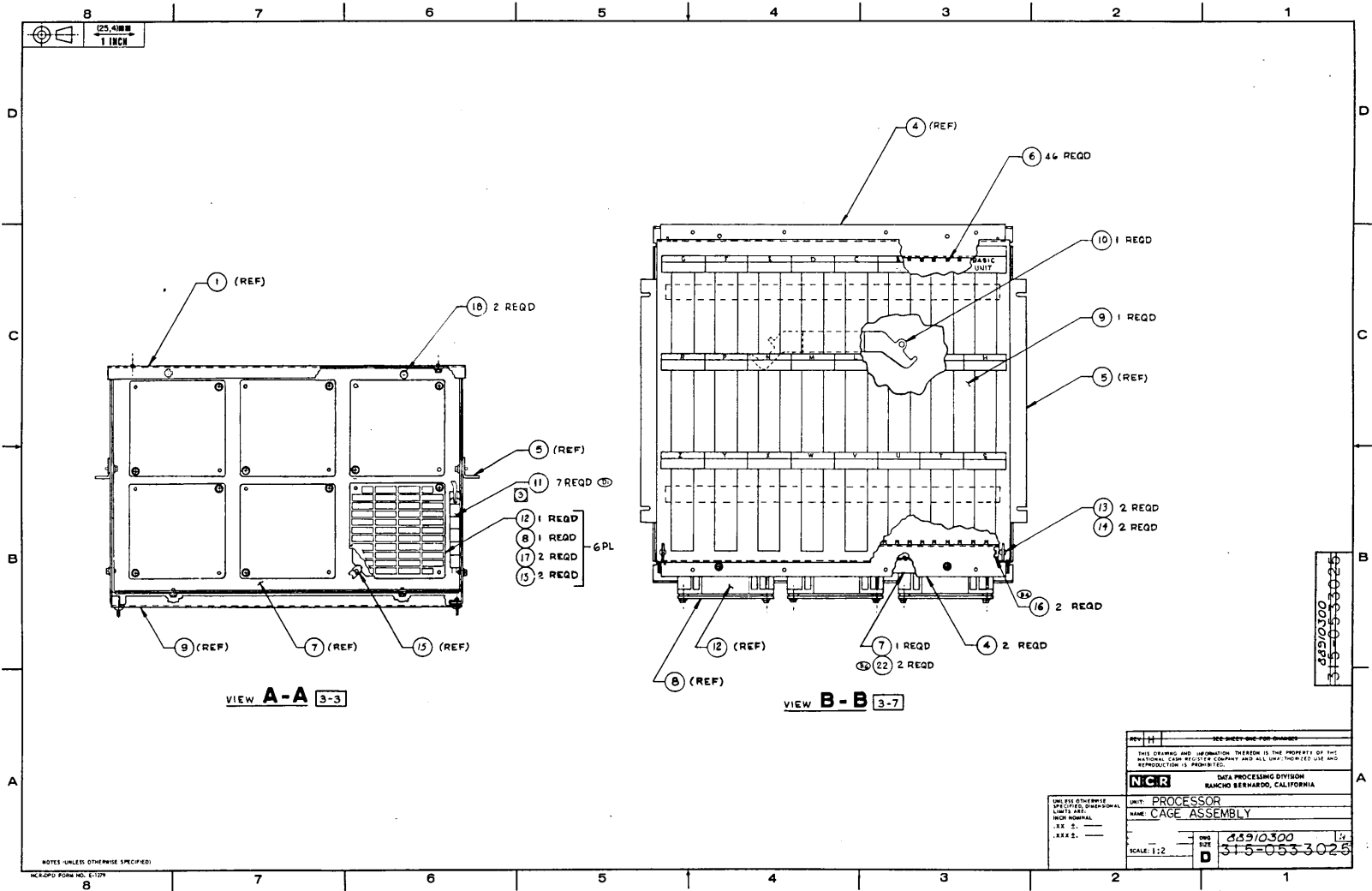
PTH CHKD ENG MFG APPR	CONTROL DATA SMALL COMPUTER DEVELOPMENT DIVISION CODE IDENT 08132	TITLE BASIC MOS MP17 PROCESSOR FIRST USED ON MP17/AB113-A	PREFIX DOCUMENT NO. 96752000	REV. L			
SHEET REVISION STATUS		REVISION RECORD					
		REV	ECO	DESCRIPTION	DRPT	DATE	APP
		00		CL C	LVP	1-13-76	E.L.
		01	14418	CL B. PRE-RELEASED	LVP	4-24-76	E.L.
		02	14497	SEE ECO	DL	5-27-76	E.L.
		03	14572	SEE ECO	DL	1-7-76	E.L.
		A	DS14822	CL A. RELEASED SEE ECO	JIM	6-9-77	AW
		B	DS14708	F/N 3 WAS 88909600	UM	6-9-77	LVP
		C	DS14851	SEE ECO	DL	7-1-77	AW
		D	DS14761	CHANGED F/N 2	DL	7-13-77	AW
		E	DS14950	F/N 3 WAS 96753855	LVP	9-28-77	AW
		F	DS14951	SEE ECO	LVP	10-1-77	LVP
		G	DS21019	INA SUPERSEDED BY NONE	WISH	2-12-78	AW
		H	DS21084	P/L CHANGE	DL	3-29-78	AW
		J	DS21076	P/L CHG	DL	6-15-78	AW
		K	DS21059	F/N 7 WAS 96744241	TL	10-13-78	AW
		L	DS21702	SEE ECO	KB		
NOTES:							
DETACHED LISTS							

AA8100 REV. 8/71

PRINTED IN U.S.A.

Figure 3-1. AA132-A, AA133-A Basic MOS Processor (Sheet 2 of 2)

Figure 3-2. AA132-A, AA133-A Processor Cage Assembly (Sheet 2 of 4)



DWN	1-1-76	CONTROL DATA	TITLE	CAGE ASSEMBLY-PROCESSOR	PREFIX	DOCUMENT NO	REV
CHKD	7-2-76	SMALL COMPUTER DEVELOPMENT DIVISION	FIRST USED ON	MP 17	DR	88910300	H
ENG	7-2-76	CODE IDENT					
MFG		09132					
APPR							

SHEET REVISION STATUS				REVISION RECORD			
REV	ECO	DESCRIPTION	DRFT	DATE	APP		
D	14532	P/L CHG ONLY	JM	7-7-76	E.L.		
E	14425	SEE ECO	JM	9-16-76	E.L.		
F	DS14769	P/L CHG ONLY	JM	2-7-77	AW		
G	DS14985	P/L CHG ONLY	AB	2-21-78	AW		
H	DS21123	DELETED F/N 24, F/N 11 WAS 88916120	TVH	7-19-78	AW		

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

AA1030

NOTES:

DETACHED LISTS

AA130 REV. 8/71

PRINTED IN U.S.A.

DWN	R. PROCT	4-29-76	CONTROL DATA	TITLE	CAGE ASSY - PROCESSOR	PREFIX	DOCUMENT NO	REV
CHKD	7-1-76	5-6-76	SMALL COMPUTER DEVELOPMENT DIVISION	FIRST USED ON	MP 17	PL	88910300	H
ENG	W. H. H. H.	5-6-76	CODE IDENT					
MFG			09132					
APPR	G. H. H. H.	5-6-76						

SHEET REVISION STATUS				REVISION RECORD			
REV	ECO	DESCRIPTION	DRFT	DATE	APP		
C	014477	SEE ECO	R.P.	5-9-76	E.L.		
D	14532	F/N 18 WAS 96753038 F/N 25 WAS 96753039	JM	7-7-76	E.L.		
E	14425	F/N 3 WAS 96746300 F/N 7 WAS 96746400	JM	2-7-77	AW		
F	DS14769	F/N 18 WAS 96750001 F/N 22 WAS 96753037 F/N 25 WAS 96750002	JM	2-7-77	AW		
G	DS14985	F/N 4 WAS 96746100	AB	2-21-78	AW		
H	DS21123	DELETED F/N 24 (88916122) F/N 11 WAS 88916120	TVH				

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

AA1030

NOTES:

DETACHED LISTS

AA130 REV. 8/71

PRINTED IN U.S.A.

Figure 3-2. AA132-A, AA133-A Processor Cage Assembly (Sheet 3 of 4)

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

AA910300		4	CL 3	C	CALLS ASSY=PROCESSOR	PS	MD17	10/11/74	07/03/78	
ASSEMBLY NUMBER	REV	CLASS	SW	SE	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PC
20	A	96156108	EFF	PC	SPEC-MARKING/LETTERING PLT	IN	014477	042976	PFE4	N
10	C	96911900	100	PC	TOOL-EXTRACTOR, CARD	IN	014477	042976	AYD4	N
12	A	96912600	400	PC	FAN- TH-FAITAL FANL IN VENTURI	IN	014477	042976	DD4	N
4	A	96912100	400	PC	SLIDE-CARD PRINTED CIRCUIT	IN	014477	042976	DD4	N
11	A	96914110	500	PC	CABLE-FAN ASSY, 12 IN.	IN	014477	042976	DD4	N
11	A	96914120	500	PC	CABLE-FAN ASSY, 12 IN.	OUT	021123	042976	DD4	N
24	A	96914123	100	PC	CABLE-FAN ASSY, 12 IN.	IN	014477	042976	DD4	N
24	A	96914123	100	PC	CABLE-FAN ASSY, 12 IN.	OUT	021123	042976	DD4	N
22	A	96744972	200	PC	SCREW-TND ROLL A-32 1/4 LG	IN	014769	010677	DDP3	N
18	A	96744973	200	PC	SCREW-TND ROLL A-32 3/4 LG	IN	014769	010677	DDP3	N
25	A	96744974	400	PC	SCREW-TND ROLL A-32 1/2 LG	IN	014769	010677	DDP3	N
1	D	96746000	100	PC	PLATE, BASE	IN	014477	042976	PDE4	N
4	D	96746100	500	PC	BRACKET-SWITCH TOP AND BOTTOM	IN	014477	042976	DD4	N
4	D	96746100	500	PC	BRACKET-SWITCH TOP AND BOTTOM	OUT	014769	010677	DD4	N
5	C	96746200	200	PC	BRACKET-MOUNTING	IN	014477	042976	PDE4	N
3	D	96746300	500	PC	PANEL-SIDE	IN	014477	042976	PDE4	N
3	D	96746300	500	PC	PANEL-SIDE	OUT	014769	010677	PDE4	N
3	D	96746400	100	PC	PANEL-FAN	IN	014477	042976	PDE4	N
3	D	96746400	100	PC	PANEL-FAN	OUT	014769	010677	PDE4	N
9	D	96746500	100	PC	COVER- WPLENTH, PROCESSOR	IN	014477	042976	PVE4	N
8	C	96748200	400	PC	GRILLE-FAN (INJECTION-MOLN)	IN	014477	042976	DD4	N
10	A	96750001	2000	PC	SCREW A-32X.375 TND FORMING	IN	014769	010677	DD4	N
10	A	96750001	2000	PC	SCREW A-32X.375 TND FORMING	OUT	014769	010677	DD4	N
25	A	96750002	400	PC	SCREW A-32X.375 TND FORMING	IN	014769	010677	DD4	N
25	A	96750002	400	PC	SCREW A-32X.375 TND FORMING	OUT	014769	010677	DD4	N
7	P	96750074	100	PC	PANEL-FAN, PROCESSOR	IN	014425	090776	DD4	N
3	D	96750079	200	PC	PANEL-SIDE, PROCESSOR	IN	014425	090776	DD4	N
4	D	96751311	200	PC	BRACKET-GUIDE, TOP+BOTTOM PHOSR	IN	014585	011079	PVE4	N
23	A	96753037	200	PC	SCREW A-32X.375 TND FORMING	IN	014477	042976	DD4	N
23	A	96753037	200	PC	SCREW A-32X.375 TND FORMING	OUT	014769	010677	DD4	N
14	A	96753136	2000	PC	SCREW A-32X.375 TND FORMING	IN	014477	042976	DD4	N
14	A	96753136	2000	PC	SCREW A-32X.375 TND FORMING	OUT	014769	010677	DD4	N
35	A	96753039	400	PC	SCREW A-32X.375 TND FORMING	IN	014477	042976	DD4	N
35	A	96753039	400	PC	SCREW A-32X.375 TND FORMING	OUT	014769	010677	DD4	N
17	A	96753175	1200	PC	SCREW A-32X.375 HEX WSH HD	IN	014477	042976	DD4	N
15	A	96753215	1200	PC	NUT-SHEET METAL, CLIP-ON A-32	IN	014477	042976	DD4	N

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PROJECT ENGINEER

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ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

AA910300		4	CL 3	C	CALLS ASSY=PROCESSOR	PS	MD17	10/11/74	07/03/78	
ASSEMBLY NUMBER	REV	CLASS	SW	SE	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER
FIND NUMBER	SW	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PC
16	A	96753215	200	PC	NUT-SHEET METAL CLIP-ON	IN	014477	042976	DD4	N
13	A	96753211	200	PC	FASTENER, DIAHPTED TURN	IN	014477	042976	DD4	N
14	A	96753242	500	PC	FASTENER, RING, DETAINING	IN	014477	042976	DD4	N
11	A	96754111	700	PC	CABLE-WIFFIN FAN 12 IN.	IN	021123	043078		N
					NUMBER OF LINE ITEMS = 40 HIGHEST FIND NUMBER = 25					

AA 2709-1 REV 7.78

PROJECT ENGINEER

SCM

Figure 3-2. AA132-A, AA133-A Processor Cage Assembly (Sheet 4 of 4)

[illegible]

3-7

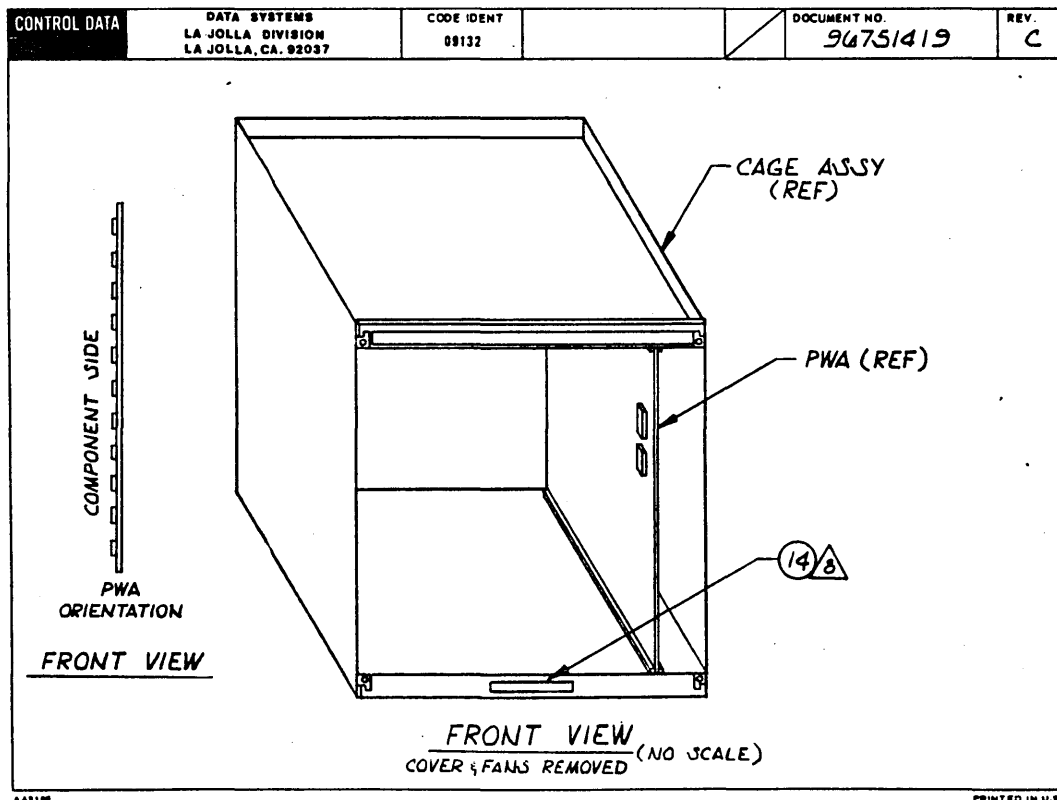
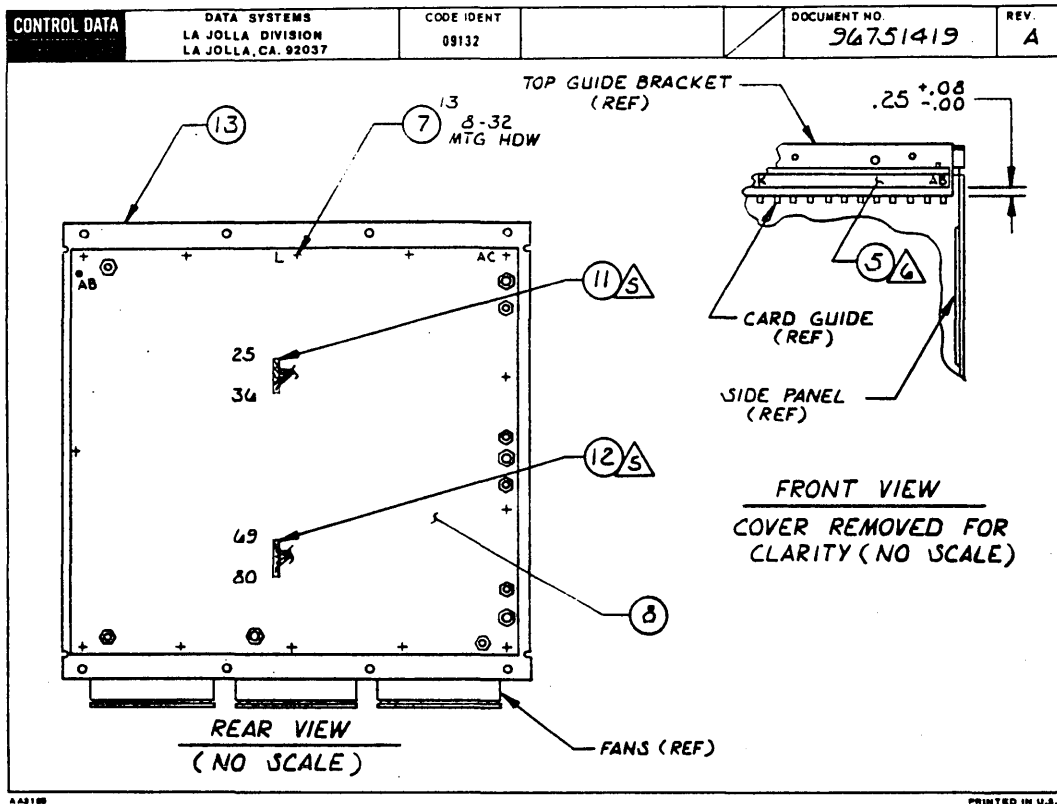


Figure 3-3. AA132-B/C, AA133-B, AA153-A Basic MOS Central Processor Unit (Sheet 2 of 3)

ASSEMBLY PARTS LIST

SPARE CODE
S = SPARE PARTS
N = NON SPARE PARTS

96751419	K	CLA	A	MOS BASIC CENTRAL PROCESS UNIT	DSM	AR113B	09/24/77	06/27/79	
ASSEMBLY NUMBER	REV	CLASS	CH	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	QTY	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE NO.	DATE EFFECTIVE	MAKE/OUT TYPE	PC	NC
1	D	88909100	100	PC	PWA-STATUS MODE INTERRUPT (7EHT)	IN			AYPA	N	N
2	D	88909400	100	PC	PWA-CONTROL NO.2 (7EKT)	IN			AYPA	N	N
3	D	88910201	100	PC	PWA-CPU ARITH FILE 1 (7ELT)	IN			AYPA	N	N
4	C	94277400	200	PC	STRAP CABLE TIE	IN			PPP3	N	N
10	A	96720404	100	PC	PWA-1700 XFORM W/BCD 8KFT	IN	021664	072779	AYPA	N	N
10	D	96736700	100	PC	PWA-1700 XFORM W/BCD (7DUT)	IN	021035	010870	AYPA	N	N
10	D	96736700	100	PC	PWA-1700 XFORM W/BCD (7DUT)	OUT	021084	031778	AYPA	N	N
10	D	96736700	100	PC	PWA-1700 XFORM W/BCD (7DUT)	IN	021120	070178	AYPA	N	N
10	D	96736700	100	PC	PWA-1700 XFORM W/BCD (7DUT)	OUT	021210	000078	AYPA	N	N
5	C	96744112	100	PC	LABEL IDENT, 26 POS BACK PANEL	IN			PPP4	N	N
4	D	96744241	100	PC	PWA-INTERNAL I/O TTY (7EHT)	OUT	021059	110378	AYPA	N	N
7	A	96744973	1300	PC	SCREW-TMD ROLL 8-32 3/8 LG	IN			PPP3	N	N
8	A	96750799	100	PC	WIRED PANEL ASSY-26P MOS BASIC	IN			AYC4	N	N
9	D	96751017	100	PC	PWA-CONTROL NO.1 7EHT	OUT	021076	091578	AYPA	N	N
10	D	96751001	100	PC	PWA-1700 XFORM W/BCD (7EHT)	OUT	021055	010870	AYPA	N	N
11	A	96751130	100	PC	CABLE ASSY-MICRO INTERRUPT	IN			AYM4	N	N
12	A	96751131	100	PC	CABLE ASSY-MACRO INTERRUPT	IN			AYM4	N	N
13	D	96751180	100	PC	CAGE ASSY-PROCESSOR WITH FANS	IN			AYM4	N	N
9	D	96752114	100	PC	PWA-CONTROL NO.1 7FZT	IN	021076	091578	AYPA	N	N
6	D	96752182	100	PC	PWA-INTERNAL I/O TTY 8GZT	IN	021059	110378	AYPA	N	N
14	B	96752283	100	PC	LABEL-CAUTION (PWA NOT KEYED)	IN	021045	011178	PPP4	N	N
10	D	96752604	100	PC	PWA-1700 XFORM W/BCD 8KFT	IN	021004	031778	AYPA	N	N
10	D	96752604	100	PC	PWA-1700 XFORM W/BCD 8KFT	OUT	021120	070178	AYPA	N	N
10	D	96752604	100	PC	PWA-1700 XFORM W/BCD 8KFT	IN	021210	000078	AYPA	N	N
10	D	96752604	100	PC	PWA-1700 XFORM W/BCD 8KFT	OUT	021664	072779	AYPA	N	N

NUMBER OF LINE ITEMS = 25
HIGHEST FIND NUMBER = 14

AA 2700-1 REV 7-78

PROJECT ENGINEER

SCMO

INTERDIVISIONAL DOCUMENT

DSM	CONTROL DATA	TITLE	MOS BASIC CENTRAL PROCESSOR UNIT	PREFIX	DOCUMENT NO.	REV.
CHD					96751419	K
ENG	DATA SYSTEMS	FIRST USED ON	AB113-B (CYBER 18)			
MFG	LAIRDS DIVISION					
APP	CODE IDENT					
	88132					

SHEET REVISION STATUS				REVISION RECORD			
REV	ECO	DESCRIPTION	DRFT	DATE	APP		
A	DS18750	CL A RELEASED	JA	UM	9-26-77	AW	
B	DS21035	P/L CHG	JA	PR	1-19-78	AW	
C	DS21045	SEE ECO	JA	UM	2-16-78	AW	
D	DS21084	SEE ECO	JA	DL	3-29-78	AW	
E	DS21120	F/N 10 WAS 94752604	JA	UM	4-27-78	AW	
F	DS21076	P/L CHG	JA	PR	6-15-78	AW	
G	DS21210	P/L CHG	JA	PR	9-20-78	AW	
H	DS21059	F/N 6 WAS 96744241	JA	PR	10-13-78	AW	
J	DS21395	SEE ECO	JA	PR	6-6-79	AW	
K	DS21664	EFFECTIVITY CHG ONLY	JA	SH	7-16-79	AW	

NOTES:

DETACHED LISTS

AA132 REV. 6/71

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Figure 3-3. AA132-B/C, AA133-B, AA153-A Basic MOS Central Processor Unit (Sheet 3 of 3)

REV	CHD	END	WPS	APPR	DATE	BY	DATE	BY	DATE	BY	TITLE	PREFIX	DOCUMENT NO.	REV.		
											WIRED PANEL ASSY. -24 POS. MOS BASIC CPU		76750779	B		
					FIRST USED ON					SHEET						
					AB113-B											
SHEET REVISION STATUS										REVISION RECORD						
										REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
										B	0321513	REVISED & REDRAWN	PV	11-80		
										INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.						
NOTES:																
DETACHED LISTS																

AA0100 REV. 0/71

PRINTED IN U.S.A.

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 00132	DOCUMENT NO 76750779	REV. B
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NOTES:

- BACKPANEL WIRING SHALL COMPLY WITH CDC-STD 1-60.002 FOR WRAPPING 30 AWG WIRE ON 0.025 INCH SQUARE POSTS WITH CLASS "A" WRAPS. IN CASE OF CONFLICT WITH CDC-STD 1-60.002, WIRING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
- WIRING LEVELS AND POINTS-OF-CONNECTION SHALL BE ACCORDING TO WIRELIST 76750778.
 - WIRE SEQUENCE - WITHIN EACH LEVEL, THE LONGEST WIRES SHALL BE INSTALLED FIRST CONTINUING TO THE SHORTEST WIRES. ALL Z1 LEVEL WIRES SHALL BE INSTALLED PRIOR TO ANY Z2 LEVEL WIRES. SEE SHEET 3 FOR LEVEL DEFINITIONS.
 - WIRE ROUTING - WIRES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE PANEL IN A RANDOMLY DISTRIBUTED, POINT-TO-POINT (STRAIGHT LINE) METHOD.
 - WIRE LENGTH - THE LENGTH OF WIRE BETWEEN POSTS SHALL NOT EXCEED THE POINT-TO-POINT DISTANCE FROM POST-TO-POST BY MORE THAN ONE INCH.
 - WRAP HEIGHTS - THE MAXIMUM ALLOWABLE HEIGHT OF A Z1 LEVEL WRAP IS 0.200 INCH AS MEASURED FROM THE SURFACE OF THE PANEL TO THE TOP OF THE WRAP. THE HEIGHT OF A Z2 LEVEL WRAP MUST NOT EXCEED 0.350 INCH. SEE SHEET 3.
 - WIRE TYPE - THE WIRE USED SHALL CONFORM TO THAT SPECIFIED ON PARTS LIST 76750779.
- THE VENDOR SHALL CONTINUITY TEST THE WIRED PANEL ASSEMBLY AND CERTIFY IT IS IN COMPLIANCE WITH WIRELIST 76750778.

⚠ VENDOR TO RUBBER INK STAMP THE FOLLOWING INFORMATION PER CDC-SPE. 10121502. SEE SHEETS 4 AND 5 FOR LOCATIONS.

- 76750779-___ (CORRECT REVISION).
- DATE WIRED.
- CONTINUITY CERTIFICATION TEST STAMP.
- VENDOR NAME OR IDENTIFYING SYMBOL.

Figure 3-4. AA132-B/C/D, AA133-B, AA153-A, AA155-B Basic MOS CPU Wired Panel Assembly (Sheet 1 of 3)

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA 92037	CODE IDENT 88132	DOCUMENT NO. 76750777	REV. 8
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VENDOR NAME 4b

CERTIFICATION STAMP 4c

DATE WIRED 4d

CONTROL DATA
CORPORATION

ASSEMBLY PARTS LIST

SPARE CODE
S - SPARE PARTS
N - NON SPARE PARTS

76750777	R	CLA	A	WIRED PANEL ASSY-26P MOS BASIC	DSM	AB113R	09/24/77	07/16/80	
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ASSEMBLY NUMBER	REV	CLASS	HW	ASSEMBLY DESCRIPTION	DESIGN NUMBER	PRINT NUMBER	RELEASE DATE	PRELIMINARY DATE	PAGE NUMBER
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FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORDER NUMBER	DATE EFFECTIVE	MAKE/BUY TYPE	REV	QTY
4	A	10121502	REF		PC ES-MKGS AND ICENT. INK STAMP	IN	021573	071680	RFE4	N	
1	A	15006501	1200000		IN WIRE-ELECT. WIRE WRAP TEFZEL	OUT	021573	071680	PPP4	N	
1	C	52629946	800000		IN WIRE ELEC 30 GA BLUE	IN	021573	071680	PPP1	N	
2	A	96749704	100		PC RACKPANEL ASSY-26 POS UNWIRED	IN			APP4	N	
3	A	96750798	REF		PC WIRE STRING LIST-MOS BASIC	IN	021573	071680	RFE4	N	
NUMBER OF LINE ITEMS = 5											
HIGHEST FIND NUMBER = 4											

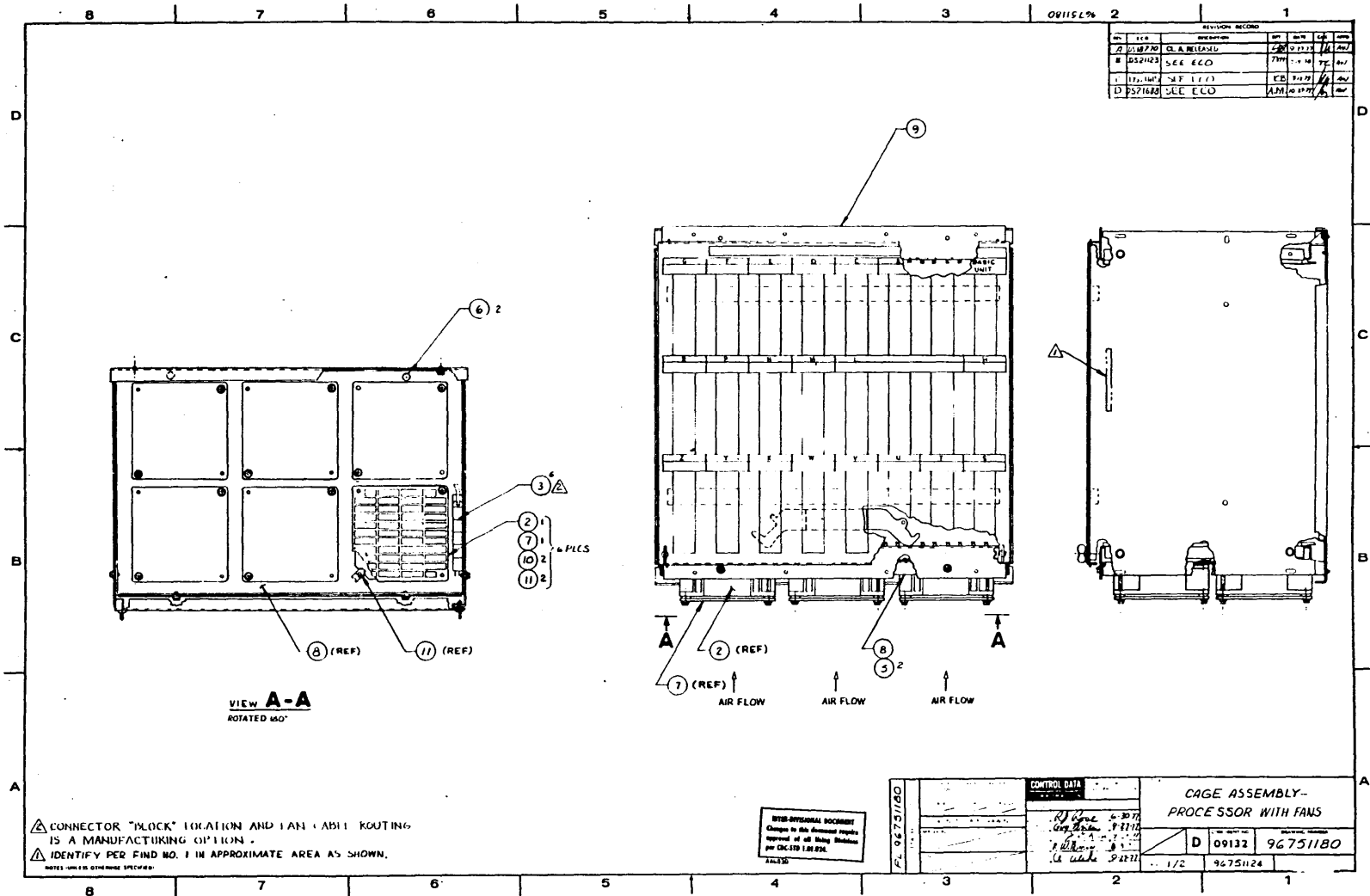
46 8700-1 REV 7.78

SCMD

INTERDIVISIONAL DOCUMENT

Figure 3-4. AA132-B/C/D, AA133-B, AA153-A, AA155-B Basic MOS CPU Wired Panel Assembly (Sheet 3 of 3)

Figure 3-5. AA132-B/C/D, AA133-A/B, AA153-A, AA155-B Processor Cage with Fans (Sheet 1 of 2)



REVISION RECORD							
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP	
A	DS21677	CL. A. RELEASED	AB	8-2-79	1/1	GP	
B	DS22127	ADD'D NOTE 4 & CHG P/L	BR	11-6-81	1/1	AW	
C	DS22172	SEE ECO	BR	4-5-82	1/1	AW	
D	DS22187	SEE ECO	J.V.W.	8-20-82	1/1	AW	
E	DS22294	SEE ECO	J.V.W.	7-19-83	1/1	AW	

INTER-DIVISIONAL DOCUMENT

Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.

AA6030 +D

DWN	A. Burger	5-30-79	DS	TITLE PWA KIT - 18-20 PROCESSOR
CHKD	1/1	7-9-79		
ENG	1/1	7-13-79		
MFG	1/1	7-16-79		
APP	1/1	8-2-79		

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DWG No 88951807	SCALE 88951805
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DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO. 88951807	REV D
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NOTES:

- ⚠ OPTIONAL ADD-ON EQUIPMENTS THAT ARE NOT SUPPLIED AS PART OF THE BASIC PROCESSOR.
- ⚠ RESERVED FOR FUTURE PERIPHERAL CONTROLLER DESIGNS. POWER INPUTS ARE +5VDC, ±12VDC AND GND.
- ⚠ OPTIONAL ADD-ON EQUIPMENT SLOTS-EQUIPMENT TYPES UNASSIGNED.

Figure 3-6. AA132-D Processor PWA Kit (Sheet 1 of 2)

CONTROL DATA	LA JOLLA SYSTEMS DIVISION La Jolla, Calif. 92037	CODE IDENT 09132	DOCUMENT NO. 88951807	REV E
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AAI32-D CARD PLACEMENT

AC	Z	Y	X	W	V	U	T	S	R	P	N	M	L	K	J	H	G	F	E	D	C	B	A	AA	AB
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	
16K/32K MOS MEM ARRAY OR ECC ARRAY	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	16K/32K MOS MEM	
AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B	AT215-B/AT241-B		
968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100	968909100		
FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A	FC 402 A		
BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B	BA209-A/BA210-B		
96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404	96720404		
96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114	96752114		
88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400	88909400		
88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201	88910201		
88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100	88909100		
96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182	96752182		
FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A	FH301-A		
GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A	GB138-A		
FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A	FA464-A		
FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A	FJ441-A/FJ442-A		
96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860	96B70860		
△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)		
(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)	(AQ)		
(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)	(OPEN - UNWIRED)		
(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)	(AQ-DMA)		
(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER	(AQ) IOM ADAPTER		
(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL	(SET/SAM) CONTROL		

MOS BASIC CPU



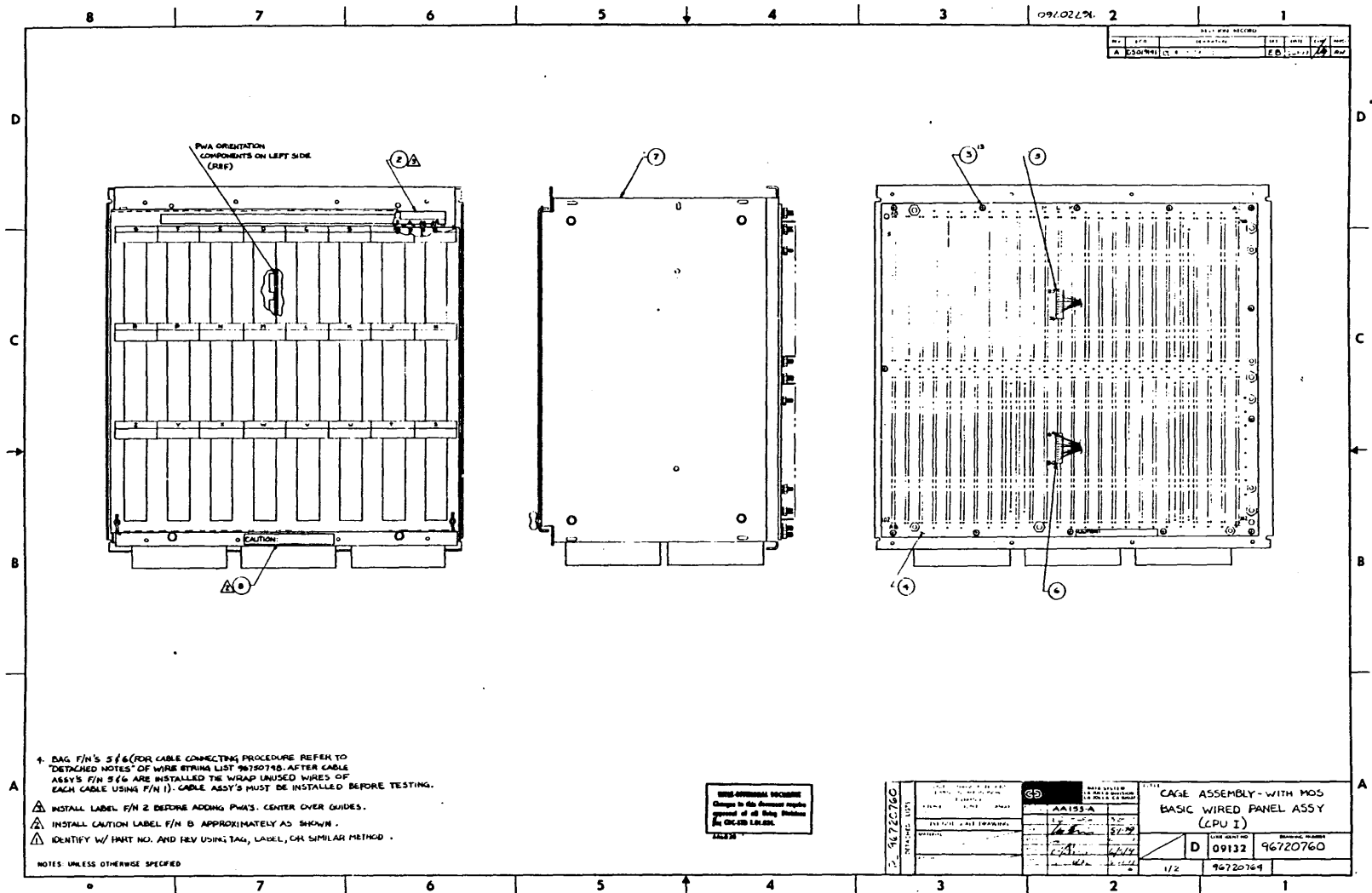
ASSEMBLY PARTS LIST

88951807	F	A	A	PWA KIT-1R-20 PROCESSOR	DSH	1R-20	07/29/79	022294	07/22/83	
ASSEMBLY NUMBER	REV	CL	SE	ASSEMBLY DESCRIPTION	DRAWN	FIRST	RELEASE	CHANGE NO.	PROCESSING	PAGE
					SOURCE	ISSUE	DATE	NUMBER	DATE	NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE NO.	DATE EFFECTIVE	NAME/OUT PART TYPE	PG	NO
1	D	88909100	1.00	PC	PWA-STATUS MODE INTERRUPT (7EHT)	IN			AYP4	N	N
2	D	88909400	1.00	PC	PWA-CONTROL NO.2 (7EKT)	IN			AYP4	N	N
3	D	88910201	1.00	PC	PWA-CPU ARITH FILE 1 (7ELT)	IN			AYP4	N	N
4	A	96720404	1.00	PC	PWA-1700 XFORM W/BCD BKFT	IN			AYP4	N	N
5	D	96752104	1.00	PC	PWA-MOS MEM I/F DATA 7FHT	OUT	022172	032382	AYP4	N	N
6	D	96752114	1.00	PC	PWA-CONTROL NO.1 7FZT	IN			AYP4	N	N
7	D	96752170	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVZ	OUT	022127	032582	AYP4	N	N
8	D	96752182	1.00	PC	PWA-INTERNAL I/O TTY RGZT	IN			AYP4	N	N
9	A	96870860	1.00	PC	PWA-FDD I/F 9KST	IN			AYP4	N	N
5	D	96890065	1.00	PC	PH ASSY-MOS MEMORY INTF (DATA)	IN	022172	032382		N	N
7	D	96890065	1.00	PC	PWA-MEMORY I/F ADDRESS B1NYT	IN	022127	032642		N	N
7	D	96890065	1.00	PC	PWA-MEMORY I/F ADDRESS B1NYT	OUT	022187	102582		N	N
7	D	96890065	1.00	PC	PWA-MEMORY I/F ADDRESS B1PUT	IN	022187	102582		N	N
7	D	96890065	1.00	PC	PWA-MEMORY I/F ADDRESS B1PUT	OUT	022294	072283		N	N
7	D	96890552	1.00	PC	PWA-MEMORY I/F ADDRESS B3RNT	IN	022294	072283		N	N
NUMBER OF LINE ITEMS = 15											
HIGHEST FIND NUMBER = 9											

Figure 3-6. AAI32-D Processor PWA Kit (Sheet 2 of 2)

Figure 3-7. AA132-D, AA153-A, AA155-B, CPU I Cage with Basic MOS Wired Panel (Sheet 1 of 2)



CONTROL DATA
CORPORATION

LA JOLLA SYSTEMS DIVISION
La Jolla, Calif. 92037

CODE IDENT
09132

DOCUMENT NO.
96751897

REV
J

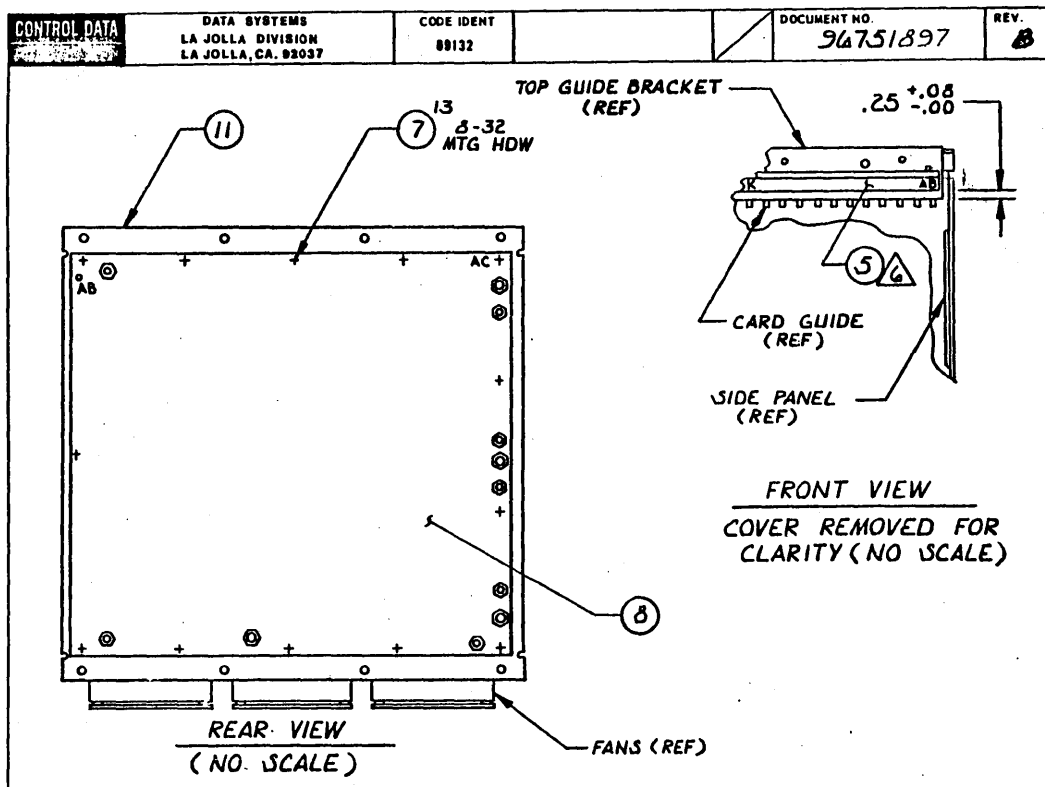
COMPONENT SIDE

PWA
ORIENTATION
FRONT VIEW

PROCESSOR CARD PLACEMENT CPU II

AD	AT275-B/AT241-B OR DT223-B	10K/32K MOS MEM ARRAY OR ECC ARRAY
Z	AT275-B/AT241-B	10K/32K MOS MEM ARRAY
Y	AT275-B/AT241-B	10K/32K MOS MEM ARRAY
X	AT275-B/AT241-B	10K/32K MOS MEM ARRAY
E	COMM CONT PROC	MOS MEM INTER- FACE ADDRESS
V	COMM CONT PROC	MOS MEM INTER- FACE DATA
U	FC402-A	BREAKPOINT CONT
T	COMM CONT PROC	2K W/READ WRITE RAM MICRO MEM
S		SPECIAL ALGOR UNIT W/ROM
R	COMM CONT PROC	TWO TRANSFORM
P		CONTROL 1
N		CONTROL 2
M		ALU W/FILE 1
L		JMI
K	COMM CONT PROC	I/O TTY INTERFACE
J	FH301-A	(AQ)CR/LP CONT
H	FA104-A	(AQ-DMA) CAS TAPE CONT
G		MLIA UNIT-PWA 3
F	DY192-A	MLIA UNIT-PWA 2
E		MLIA UNIT-PWA 1
D		CBR TO CPLR UNIT 2
C		UNIT 2 C
B		UNIT 2 B
A		UNIT 1 A
AB		CBR TO CPLR UNIT 1

3-21



ASSEMBLY PARTS LIST

96751897		K	A	A	COMM CONTROL PROCESSOR	DS	AA133A	10/26/77	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	REV	CL	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS.	PART DESCRIPTION	INPUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MANUFACT. PART NO.	PG	REV
1	D	88909100	1.00	PC	PWA-STATUS MODE INTERRUPT(7EHT)	IN			AYP4	N	
2	D	88909400	1.00	PC	PWA-CONTROL NO.2 (7EKT)	IN			AYP4	N	
3	D	88910201	1.00	PC	PWA-CPU ARITH FILE 1 (7ELT)	IN			AYP4	N	
10	A	96720404	1.00	PC	PWA-1700 XFORM W/BCD 8KFT	IN	021702	082779	AYP4	N	
4	D	96742600	1.00	PC	PWA-2K RAM MICROMEM W/PAR 5XNT	IN			AYH4	N	
5	C	96744112	1.00	PC	PWA-LABEL IDENT, 26 POS RACK PANEL	IN			PPP4	N	
6	D	96744241	1.00	PC	PWA-INTERNAL I/O TTY (7EMT)	IN			AYP4	N	
7	A	96744973	13.00	PC	SCREW-THD ROLL 8-32 3/8 LG	IN			PPP3	N	
8	A	96749712	1.00	PC	WIRED PANEL ASSY-COMM CONT PRC	IN			AYC4	N	
9	D	96751017	1.00	PC	PWA-CONTROL NO.1 7EFT	OUT	021076	091578	AYH4	N	
10	D	96751046	1.00	PC	PWA-1700 TRANSFORM W/ROM 7EFT	OUT	021076	091578	AYH4	N	
11	D	96751180	1.00	PC	CAGE ASSY-PROCESSOR WITH FANS	IN			AYH4	N	
12	D	96752104	1.00	PC	PWA-MOS MEM I/F DATA 7EFT	IN	014942	111877	AYH4	N	
13	D	96752104	1.00	PC	PWA-MOS MEM I/F DATA 7EFT	OUT	022172	032382	AYH4	N	
14	D	96752107	1.00	PC	PWA-MOS MEM I/F ADDR 7EFT	IN	014942	111877	AYH4	N	
15	D	96752107	1.00	PC	PWA-MOS MEM I/F ADDR 7EFT	OUT	022172	032382	AYH4	N	
9	D	96752114	1.00	PC	PWA-CONTROL NO.1 7FZT	IN	021076	091578	AYP4	N	
12	D	96752170	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVY	IN	021076	091578	AYH4	N	
13	D	96752170	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVY	OUT	022172	032382	AYH4	N	
10	D	96752201	1.00	PC	PWA-1700 TRANSFORM W/ROM 8EFT	IN	021076	091578	AYH4	N	
10	D	96752201	1.00	PC	PWA-1700 TRANSFORM W/ROM 8EFT	OUT	021702	082779	AYH4	N	
12	D	96753095	1.00	PC	PWA-MOS MEM I/F (DATA) 6EFT	OUT	014942	111877	AYH4	N	
13	D	96753097	1.00	PC	PWA-MOS MEM ADDRESS (6CJT)	OUT	014942	111877	AYH4	N	
13	D	96754583	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 7DIT	IN	014942	111877	AYH4	N	
13	D	96754583	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 7DIT	OUT	021076	091578	AYH4	N	
14	A	96762000	1.00	PC	MOS ARRAY ADDRESS CONNECTOR	IN			AYH4	N	
12	D	96890065	1.00	PC	PW ASSY-MOS MEMORY INTF (DATA)	IN	022172	032382		N	
13	D	96890050	1.00	PC	PWA-MEMORY I/F ADDRESS 8INXT	IN	022172	032382		N	
13	D	96890050	1.00	PC	PWA-MEMORY I/F ADDRESS 8INXT	OUT	022172	032382		N	
13	D	96890051	1.00	PC	PWA-MEMORY I/F ADDRESS 8IPUT	IN	022172	032382		N	
13	D	96890051	1.00	PC	PWA-MEMORY I/F ADDRESS 8IPUT	OUT	022172	032382		N	
13	D	96890552	1.00	PC	PWA-MEMORY I/F ADDRESS 83RNT	IN	022294	072283		N	

NUMBER OF LINE ITEMS = 32
HIGHEST FIND NUMBER = 14

Figure 3-8. AA133-A Communication Controller Processor (96751897) (Sheet 2 of 3)

DWN		CONTROL DATA DATA SYSTEMS LA 1081A - 001132 CODE IDENT 00132	TITLE COMMUNICATIONS CONTROLLER PROCESSOR		PREFIX	DOCUMENT NO. 96751897	REV K
CHKD			FIRST USED ON AA133-A				
ENG							
MFG							
APPR							

SHEET REVISION STATUS												REVISION RECORD					
REV	ECO	DESCRIPTION										DRFT	DATE	APP			
A	DS14889	C.I.A. RELEASED										JM	11-4-77	AW			
B	DS4982	ADDED NOTE 8. REVISED P/L										DL	12/14/77	LVF			
C	DS21084	SEE ECO										DL	3-29-78	AW			
D	DS21078	P/L CHANGE										DL	4-24-78	AW			
E	DS21076	P/L CHG										DL	6-15-78	AW			
F	DS21762	SEE ECO										KB	9-10-78	AW			
G	DS22127	ADD'D NOTE 9 P/L CHG										BR	11-6-81	AW			
H	DS22172	P/L CHG										BR	4-5-82	AW			
J	DS22187	SEE ECO										JVM	8-23-82	AW			
K	DS22294	P/L CHANGE ONLY										JH	7-29-83	AW			

NOTES:

DETACHED LISTS

Figure 3-8. AA133-A Communication Controller Processor (96751897) (Sheet 3 of 3)

DATE	2-12-77	DATA SYSTEMS	TITLE	WIRED PANEL ASSY. -26 POS. COMM CNTL PROC.	PREFIX	DOCUMENT NO.	REV.
CHKD	2-18-77	LA JOLLA DIVISION	FIRST USED ON	AA109-B		96749712	E
ENG	2-22-77	LA JOLLA DIVISION					
APP	2-24-77	CODE IDENT					
		09132					

SHEET REVISION STATUS				REVISION RECORD			
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP	
E	DS21573	REVISED & REDRAWN		8-1-80			

INTER-DIVISIONAL DOCUMENT
 Changes to this document require
 approval of all Using Divisions
 per CDC-STD 1.01.024.

NOTES:

DETACHED LISTS

AA109 REV. 5/71

PRINTED IN U.S.A.

DATA SYSTEMS	CODE IDENT	DOCUMENT NO	REV.
LA JOLLA DIVISION	09132	96749712	E
LA JOLLA, CA. 92037			

NOTES:

- BACKPANEL WIRING SHALL COMPLY WITH CDC-STD 1.60.002 FOR WRAPPING 30 AWG WIRE ON 0.025 INCH SQUARE POSTS WITH CLASS "A" WRAPS. IN CASE OF CONFLICT WITH CDC-STD 1.60.002, WIRING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
- WIRING LEVELS AND POINTS-OF-CONNECTION SHALL BE ACCORDING TO WIRELIST 96749711.
 - WIRE SEQUENCE - WITHIN EACH LEVEL, THE LONGEST WIRES SHALL BE INSTALLED FIRST CONTINUING TO THE SHORTEST WIRES. ALL Z1 LEVEL WIRES SHALL BE INSTALLED PRIOR TO ANY Z2 LEVEL WIRES. SEE SHEET 3 FOR LEVEL DEFINITIONS.
 - WIRE ROUTING - WIRES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE PANEL IN A RANDOMLY DISTRIBUTED, POINT-TO-POINT (STRAIGHT LINE) METHOD.
 - WIRE LENGTH - THE LENGTH OF WIRE BETWEEN POSTS SHALL NOT EXCEED THE POINT-TO-POINT DISTANCE FROM POST-TO-POST BY MORE THAN ONE INCH.
 - WRAP HEIGHTS - THE MAXIMUM ALLOWABLE HEIGHT OF A Z1 LEVEL WRAP IS 0.200 INCH AS MEASURED FROM THE SURFACE OF THE PANEL TO THE TOP OF THE WRAP. THE HEIGHT OF A Z2 LEVEL WRAP MUST NOT EXCEED 0.350 INCH. SEE SHEET 3.
 - WIRE TYPE - THE WIRE USED SHALL CONFORM TO THAT SPECIFIED ON PARTS LIST 96749712.
- THE VENDOR SHALL CONTINUITY TEST THE WIRED PANEL ASSEMBLY AND CERTIFY IT IS IN COMPLIANCE WITH WIRELIST 96749711.
- VENDOR TO RUBBER INK STAMP THE FOLLOWING INFORMATION PER CDC-SPEC 10121502. SEE SHEETS 4 AND 5 FOR LOCATIONS.

 - 96749712-___ (CORRECT REVISION).
 - DATE WIRED.
 - CONTINUITY CERTIFICATION TEST STAMP.
 - VENDOR NAME OR IDENTIFYING SYMBOL.

AA110

PRINTED IN U.S.A.

Figure 3-9. AA133-A/B, AA153-A Communication Control Processor Wired Panel (Sheet 1 of 3)

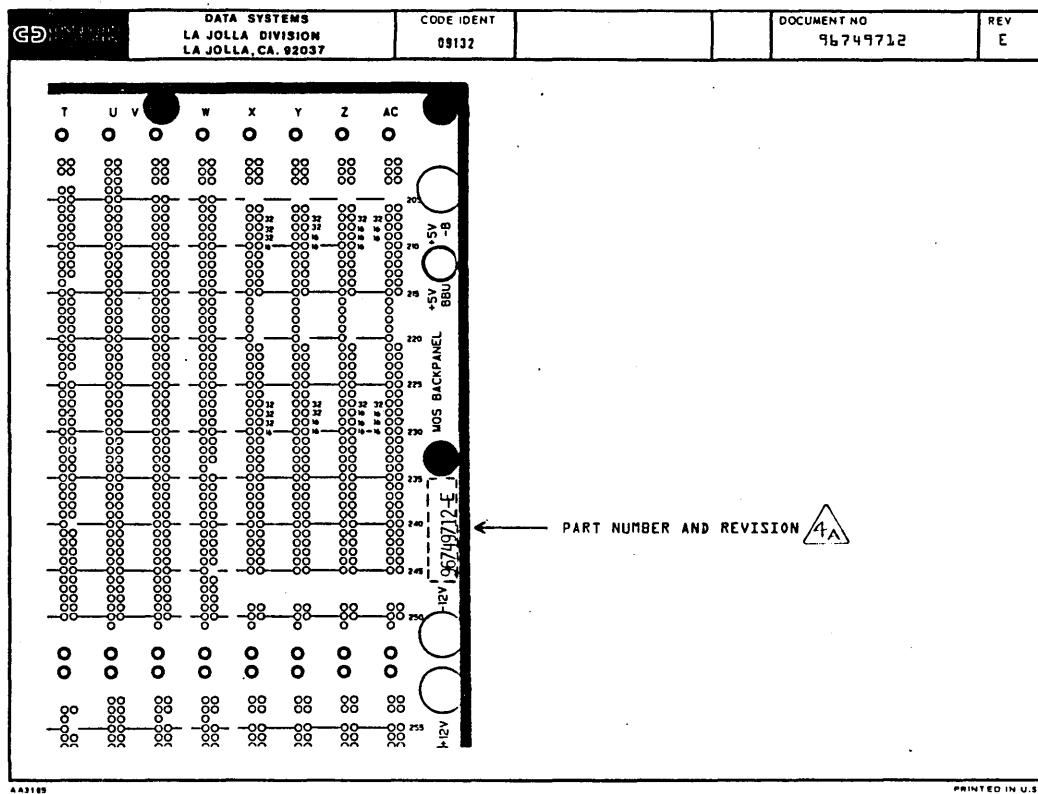
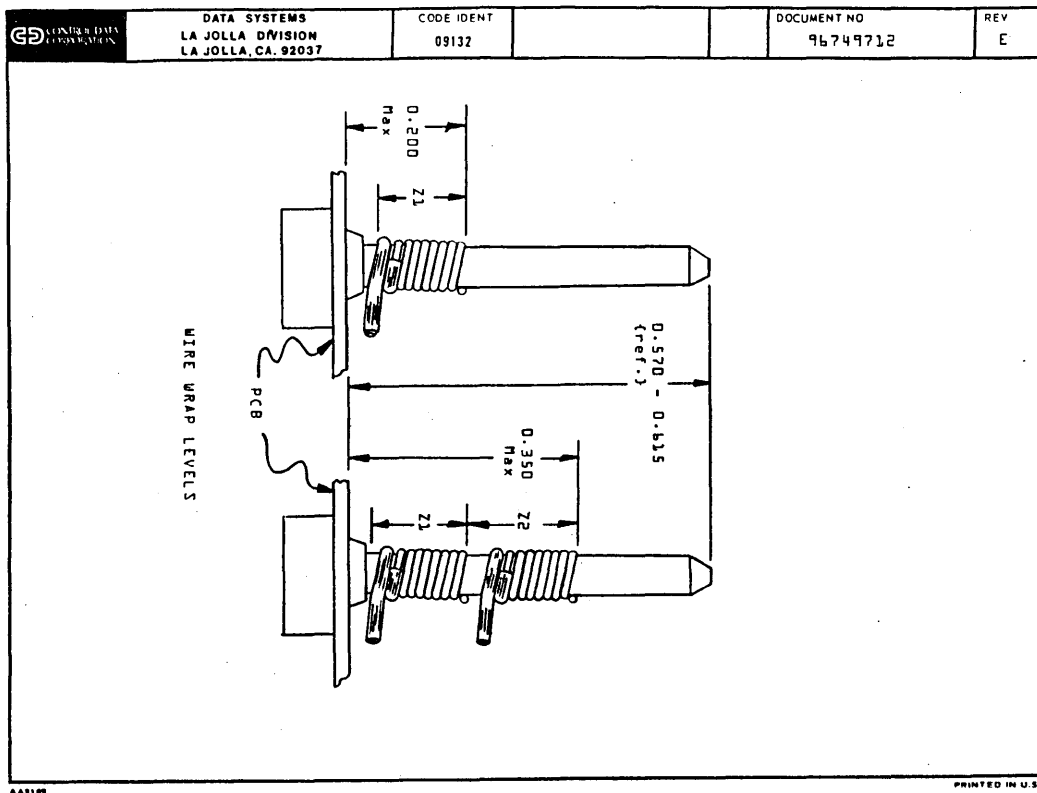


Figure 3-9. AA133-A/B, AA153-A Communication Control Processor Wired Panel (Sheet 2 of 3)

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132	DOCUMENT NO 96749712	REV E
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VENDOR NAME 4D

CERTIFICATION STAMP 4C

DATE WIRED 4B

PRINTED IN U.S.A.

		ASSEMBLY PARTS LIST				SPARE CODE S - SPARE PARTS N - NON SPARE PARTS							
96749712		E	CLA	A	WIRED PANEL ASSY-COMM CONT PRC	DSM	CBR 18	02/23/77	07/16/80				
ASSEMBLY NUMBER		REV	CLASS	DW ST	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST ISSUE	RELEASE DATE	PROCESSING DATE	PAGE NUMBER			
FIND NUMBER	DW ST	PART NUMBER		QUANTITY	UNIT MEAS.	PART DESCRIPTION		IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	MAKE/BUY PART TYPE	PN NC	S N
4	A	10121502		REF	PC	ES-MKGS AND IDENT. INK STAMP		IN	021573	071680	RFE4	N	N
3	A	15004501		1200000	IN	WIRE-ELECT WIRE WRAP TEFZEL		IN	014879	062477	PPP4	N	N
3	A	15004501		1200000	IN	WIRE-ELECT WIRE WRAP TEFZEL		OUT	021573	071680	PPP4	N	N
1	C	52629946		1000000	IN	WIRE ELEC 30 GA BLUE		IN	021573	071680	PPP1	N	N
2	A	96749704		100	PC	BACKPANEL ASSY-26 POS UNWIRED		IN	021573	071680	AYP4	N	N
1	A	96749711		REF	PC	WIRE STRING LIST-COMM CONT PRC		IN	021573	071680	RFE4	N	N
NUMBER OF LINE ITEMS = 6													
HIGHEST FIND NUMBER = 4													
PROJECT ENGINEER					SCMD					INTERDIVISIONAL DOCUMENT			

Figure 3-9. AA133-A/B, AA153-A Communication Control Processor Wired Panel (Sheet 3 of 3)

REVISION RECORD							
REV	CD	DESCRIPTION	DFT	DATE	CHKD	APP	
A	DS18509	CL A RELEASED	J.M.	2-16-77	AW		
B	DS14797	F/N 14 WAS 96749709	J.M.	2-24-77	AW		
C	DS14822	SEE ECO CL A RELEASED	J.M.	6-9-77	AW		
D	DS14708	F/N 9 WAS 88909600	J.M.	6-21-77	LVP		
E	DS14761	CHANGED F/N 11, 15 & 16	DL	7-13-77	AW		
F	DS14790	F/N 3 WAS 88894000	MRO	7-27-77	AW		
G	DS14950	F/N 9 WAS 96753855	LVP	9-28-77	AW		
H	DS14951	SEE ECO	ACT	10/5/77	LVP		
J	DS14982	ADDED NOTE 5	DS	11/14/77	LVP		
K	DS21045	SEE ECO	JH	2-16-78	AW		
L	DS21078	SERIES CODE CHG	JH	4-21-78	AW		

REVISIONS CONT

4. INSTALL CAUTION LABEL F/N 18 APPROXIMATELY AS SHOWN.

3.

2. ASSEMBLY NOT SUPPLIED AS PART OF THE BASIC PROCESSOR. EQUIPMENT APPLICATION UTILIZED BY THE CYBER 18-30 TIMESHAKE AND 255X PRODUCT LINES. EQUIPMENT IDENTIFIED AS DY192-A IN CYBER 18 APPLICATION ONLY.

1. OPTIONAL ADD-ON EQUIPMENTS THAT ARE NOT SUPPLIED AS PART OF THE BASIC PROCESSOR.

NOTES:

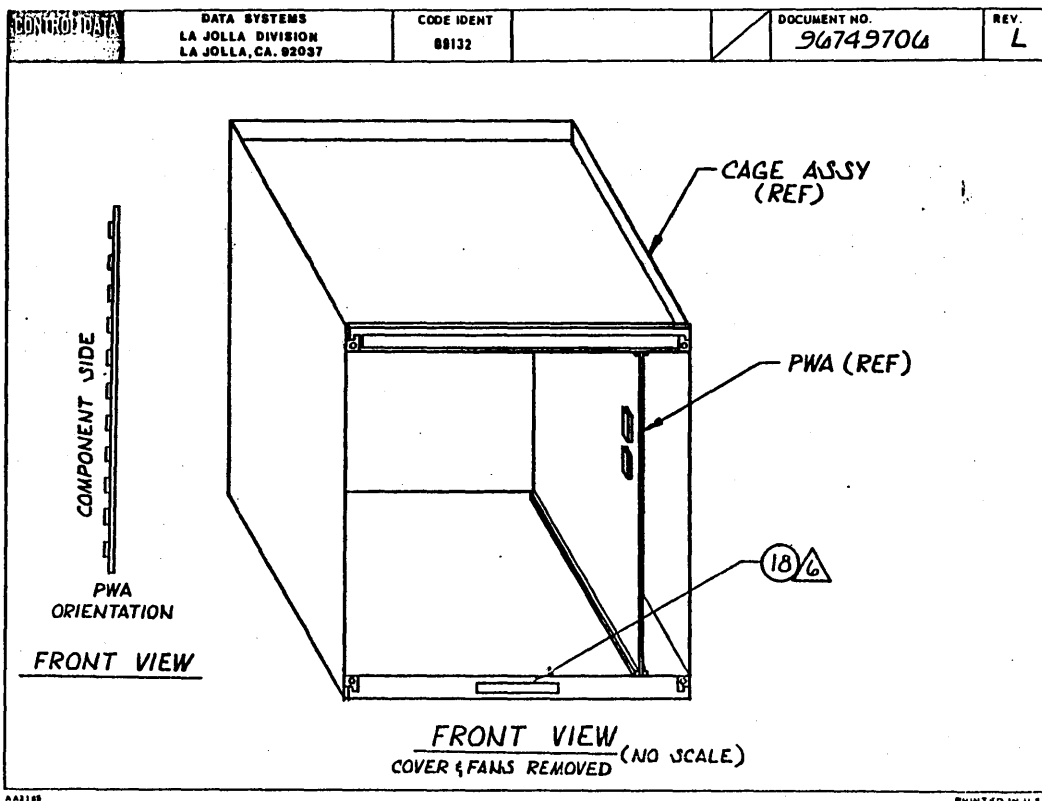
DWN	D. McRae	12-13-77	CONTROL DATA	TITLE	TOP ASSEMBLY - COMMUNICATIONS CONTROLLER PROCESSOR
CHRD	Guy, Brian	1-14-77	SMALL COMPUTER DEVELOPMENT DIVISION	AA103-B	96749706
ENG	M. J. Fiedler	1-15-77	La Jolla, CA 92037	COCH IDENT	09132
MFG	R. Wilkins	1-15-77		DWG. NO.	96749706
APP	D. Webb	5/16/77			
SCALE			96749706		

CONTROL DATA		LA JOLLA SYSTEMS DIVISION La Jolla, Calif. 92037	CODE IDENT 09132	DOCUMENT NO 96749706	REV T
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AC	Z	Y	X	W	V	U	T	S	R	P	N	M	L	K	J	H	G	F	E	D	C	B	A	AA	AB	
16K/32K MOS MEM ARRAY OR ECC ARRAY	16K/32K MOS MEM ARRAY	16K/32K MOS MEM ARRAY	16K/32K MOS MEM ARRAY	16K/32K MOS MEM ARRAY	MOS MEM INTERFACE ADDRESS	MOS MEM INTERFACE DATA	PANEL INTERFACE	2K W READ/WRITE RAM MICRO MEMORY	SPECIAL ALGOR UNIT	1700 TRANSFORM W/ROM	CONTROL 1	CONTROL 2	ALL W/FILE 1	SMI	I/O TTY INTERFACE	(AQ) CR/LP CONT	(AQ-DMA) CASS TAPE CONT	MLTA UNIT-PWA 3	MLTA UNIT-PWA 2	MLTA UNIT-PWA 1	CBR 70 CPLR UNIT 2	UNIT 2	UNIT 2	UNIT 1	UNIT 1	CBR 70 CPLR UNIT 1
AT275-B/AT241-B OR DT283-B	AT275-B/AT241-B	AT275-B/AT241-B	AT275-B/AT241-B	AT275-B/AT241-B																						

PROCESSOR CARD PLACEMENT CPU II

Figure 3-10. AA133-A Communication Control Processor Top Assembly (96749706) (Sheet 1 of 3)



ASSEMBLY PARTS LIST

96749706	U	A	A	COMM CONT PROCESSOR	DS	CHR 18	02/12/77	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	REV	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST ISSUE	RELEASE DATE	CHANGE NO. NUMBER	PROCESSING DATE	PAGE NUMBER

LINE NUMBER	QUANTITY	PART NUMBER	PART DESCRIPTION	IN/OUT STATUS	CHANGE NO. NUMBER	DATE EFFECTIVE	PART TYPE	A	B
1	1.00	88878500	PC PWA-MAINTENANCE PANEL (7E6T)	IN			AYP4	N	
2	1.00	88879721	PC CABLE ASSY-IC,24 COND.TWO CONN	IN			PPP4	N	
3	1.00	88894000	PC PWA-2K RAM MICRO MEMORY (H2)	OUT	014790	062777	AYM4	N	
4	1.00	88894300	PC CABLE, I/O-TELETYPE (MP17)	IN			AYM4	N	
5	1.00	88894400	PC CABLE,I/O-CRT (MP17)	IN			AYM4	N	
6	1.00	88909100	PC PWA-STATUS MODE INTERRUPT (TEHT)	IN			AYP4	N	
7	1.00	88909300	PC PWA-PANEL INTERFACE (75JT)	OUT	021059	110378	AYM4	N	
8	1.00	88909400	PC PWA-CONTROL NO.2 (7EKT)	IN			AYP4	N	
9	1.00	88909600	PC PWA-CONTROL NO.1	OUT	014708	051677	AYM4	N	
10	1.00	88910201	PC PWA-CPU ARITH FILE 1 (7ELT)	IN			AYP4	N	
11	1.00	96742600	PC PWA-2K RAM MICROEM W/PAR 5XNT	IN	014790	062777	AYM4	N	
12	1.00	96743730	PC PWA-MOS MEM I/F (DATA) 6ZFT	OUT	014761	070177	AYM4	N	
13	1.00	96744241	PC PWA-INTERNAL I/O TTY (7EHT)	OUT	021059	110378	AYM4	N	
14	1.00	96749703	PC CABINET ASSY-26 POSITION	IN			AYM4	N	
15	1.00	96749712	PC WIRED PANEL ASSY-COMM CONT PRC	OUT	014707	022277	AYC4	N	
16	1.00	96751017	PC PWA-CONTROL NO.1 TERT	IN	014980	091677	AYM4	N	
17	1.00	96751017	PC PWA-CONTROL NO.1 TERT	OUT	021076	091677	AYM4	N	
18	1.00	96751046	PC PWA-1700 TRANSFORM W/ROM 7FCT	IN	014951	091677	AYM4	N	
19	1.00	96752104	PC PWA-MOS MEM I/F DATA 7FXT	IN	014982	111877	AYM4	N	
20	1.00	96752104	PC PWA-MOS MEM I/F DATA 7FXT	OUT	022172	022342	AYP4	N	
21	1.00	96752107	PC PWA-MOS MEM I/F ADDR 7FXT	IN	014982	111877	AYM4	N	
22	1.00	96752107	PC PWA-MOS MEM I/F ADDR 7FXT	OUT	014982	111877	AYM4	N	
23	1.00	96752114	PC PWA-CONTROL NO.1 7FZT	IN	021076	091578	AYP4	N	
24	1.00	96752170	PC PWA-MOS MEM I/F ADDR/CONT 8CVT	IN	021076	091578	AYM4	N	
25	1.00	96752170	PC PWA-MOS MEM I/F ADDR/CONT 8CVT	OUT	022177	102361	AYM4	N	
26	1.00	96752176	PC PWA-PANEL INTERFACE 8GXT	IN	021059	110378	AYM4	N	
27	1.00	96752182	PC PWA-INTERNAL,I/O TTY AGZT	IN	021059	110378	AYP4	N	
28	1.00	96752203	PC LAHEL-CAUTION (PWAS NOT KEYED)	IN	021045	011178	PPP4	N	
29	1.00	96753001	PC PWA-1700 TRANSFORM W/ROM (VEREN C)	OUT	014761	070177	AYM4	N	
30	1.00	96753017	PC PWA-MOS MEM ADDRESS 6AYT	OUT	014761	070177	AYM4	N	
31	1.00	96753055	PC PWA-CONTROL NO.1 6CNT	IN	014761	070177	AYM4	N	
32	1.00	96753055	PC PWA-CONTROL NO.1 6CNT	OUT	014950	051677	AYM4	N	
33	1.00	96753093	PC PWA-1700 TRANSFORM ROM 6CGT	IN	014761	070177	AYM4	N	
34	1.00	96753093	PC PWA-1700 TRANSFORM ROM 6CGT	OUT	014951	091677	AYM4	N	
35	1.00	96753095	PC PWA-MOS MEM I/F (DATA) 6CHT	IN	014761	070177	AYM4	N	

Figure 3-10. AA133-A Communication Control Processor Top Assembly (96749706) (Sheet 2 of 3)



ASSEMBLY PARTS LIST

96749706	U	A	A	COMM CONT PROCESSOR	DS	CAR 18	07/12/77	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORG. NUMBER	PROCESSING DATE	PAGE NUMBER
FIND NUMBER	QUANTITY	UNIT	PART DESCRIPTION	INPUT STATUS	CHANGE ORG. NUMBER	DATE EFFECTIVE	NAME/INIT	PR	OR	Q
11 D 96753855	1.00	PC	PWA-MOS MEM I/F (DATA) 6CHT	OUT 014942	111077	AYM4	N			
16 D 96753897	1.00	PC	PWA-MOS MEM ADDRESS (6CJT)	IN 014741	070177	AYM4	N			
16 D 96753897	1.00	PC	PWA-MOS MEM ADDRESS (6CJT)	OUT 014443	111077	AYM4	N			
16 D 96754593	1.00	PC	PWA-MOS MEM I/F ADDR/CONT TOTL	IN 014643	112177	AYM4	N			
16 D 96754593	1.00	PC	PWA-MOS MEM I/F ADDR/CONT TOTL	OUT 021076	011778	AYM4	N			
17 A 96762000	1.00	PC	MOS ARRAY ADDRESS CONNECTOR	IN		AYM4	N			
11 D 96890065	1.00	PC	PW ASSY-MOS MEMORY INTF (DATA)	IN 022172	032382		N			
16 D 96890550	1.00	PC	PWA-MEMORY I/F ADDRESS 01NYT	IN 022127	102341		N			
16 D 96890550	1.00	PC	PWA-MEMORY I/F ADDRESS 01NYT	OUT 022167	102692		N			
16 D 96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 01PUT	IN 022147	102642		N			
16 D 96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 01PUT	OUT 022204	072243		N			
16 D 96890552	1.00	PC	PWA-MEMORY I/F ADDRESS 03RNT	IN 022294	072283		N			
NUMBER OF LINE ITEMS = 48 HIGHEST FIND NUMBER = 18										

DWN	CHKD	ENG	MFG	APPR	DATA SYSTEMS A/IDILA DIVISION CODE IDENT 09132	TITLE TOP ASSY- COMMUNICATIONS CONTROLLER PROCESSOR	PREFIX	DOCUMENT NO. 96749706	REV. U			
FIRST USED ON AA109-B												
SHEET REVISION STATUS						REVISION RECORD						
						REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
						M	DS21076	P/L CHG, ADDED SH 5 & 6	R/R	6-15-78	TC	AW
						N	DS21059	P/L CHG-F/N 7 & 12	R/R	10-15-78	TC	AW
						P	DS22127	ADD'D NOTE 3f CHG PL	BR	11-6-81	TC	AW
						R	DS 22172	P/L CHG	BR	4-5-82	TC	AW
						T	DS 22187	SEE ECO	JYW	8-23-82	TC	AW
						U	DS22294	PARTS LIST CHG	JYW	7-29-83	TC	AW
NOTES:												
DETACHED LISTS												

Figure 3-10. AA133-A Communication Control Processor Top Assembly (96749706) (Sheet 3 of 3)

REVISION RECORD							
REV	CO	DESCRIPTION	DRFT	DATE	CHKD	APP	
A	DS19509		J.M.	2-16-77	/	A.W.	
B	DS14802	SEE ECO	J.M.	4-26-77	/	A.W.	

NOTES:

- BACK PANEL ASSEMBLY IS TO BE FABRICATED IN ACCORDANCE WITH REQUIREMENTS DEFINED IN CDC - STD 1.60.002.
- WIRED ASSEMBLY IS TO BE TESTED AT VENDOR'S FACILITY AND CERTIFIED TO BE IN COMPLIANCE WITH THE WIRE STRING LIST BEFORE DELIVERY TO CDC.
- IDENTIFY WIRED ASSEMBLY WITH CDC PART NUMBER AND REVISION PER CDC SPECIFICATION #8818000. SEE SHEET 2 FOR LOCATION OF PART NUMBER.

OWN	D. McRae	12-15-76	CONTROL DATA SMALL COMPUTER DEVELOPMENT DIVISION La Jolla, CA 92037	TITLE WIRED PANEL ASSEMBLY - 26 POS, COMMUNICATIONS CONTROLLER PROCESSOR		
CHKD	D. Brien	1-13-77				
ENG	J. L. L. L.	1-13-77				
MFG	R. L. L.	1-13-77				
APP	D. L. L.	1-13-77				
			CODE IDENT	09132	DOC NO	96749709
			SCALE			

CONTROL DATA		SMALL COMPUTER DEVELOPMENT DIVISION La Jolla, CA 92037		CODE IDENT 89132	DOCUMENT NO 96749709	REV A
W	X	Y	Z	AC		
-	-	-	-	205		
	32	32	32 32		+5V -B	
	32	32	16 16			
	32	16	16 16			
	16	16	16	210		
-	-	-	-	215	+5V BBU	
-	-	-	-	220		
-	-	-	-	225	MOS BACKPANEL	
	32	32	32 32			
	32	32	16 16			
	32	16	16 16			
	16	16	16-16	230		
-	-	-	-	235	WWA 96749709	
-	-	-	-	240		
-	-	-	-	245		
-	-	-	-	250		
				-12V		

WWA 96749709

ASSEMBLY PART NUMBER
 LOCATION ON WIRE-WRAP
 SIDE OF PANEL ASSEMBLY

Figure 3-11. AA133-A Communication Control Processor (96749709) Wired Panel Assembly (Sheet 1 of 2)

ASSEMBLY PARTS LIST

SPARE CODE	
1	SPARE PARTS
2	NON-SPARE PARTS

96749709 B CLA A WIRED PANEL ASSY, COMM CONT PRC DS CBR 18 02/12/77 03/26/77									
ASSEMBLY NUMBER	REV. NUMBER	A. DETAIL INFORMATION		ET. NO.	REV. NO.	RE. DATE	PRICE/NO.	PAGE NUMBER	
1	A	96749701	100	PC WIRE STRING LIST-COMM CONT PRC	IN			RFE4	N
2	A	96749704	100	PC BACKPANEL ASSY-26 POS UNWIRED	IN			AYP4	N
NUMBER OF LINE ITEMS = 2 HIGHEST FIND NUMBER = 2									
PROJECT ENGINEER			SCMD						

AA 2709 REV. 1-76

Figure 3-11. AA133-A Communication Control Processor (96749709) Wired Panel Assembly (Sheet 2 of 2)

CONTROL DATA		LA JOLLA SYSTEMS DIVISION		CODE IDENT		DOCUMENT NO		REV	
LA JOLLA, CALIF. 92037				09132		88916500		N	
AC	1 MOS MEMORY								
Z	2 MOS MEMORY								
Y	1 MOS MEMORY								
X	1 MOS MEMORY								
W	MEMORY INTERFACE (ADDRESS)								
V	MEMORY INTERFACE (DATA)								
U	PANEL INTERFACE								
T	1 2K RAM AL MEMORY OR ALGR UNIT								
S	2K RAM AL MEMORY								
R	1700 TRANSFORM W/ROM								
P	CONTROL 1								
N	CONTROL 2								
M	ALU W/FILE 1								
L	SMI								
K	I/O TTY								
J	1 AQ OR CR/LR INTERFACE								
H	AQ/DMA-UNASSIGNED								
G	2 MLIA - UNIT 1								
F	2 MLIA - UNIT 1								
E	2 MLIA - UNIT 1								
D	2 CYBER 70 COUPLER - UNIT 2								
C	2 CYBER 70 COUPLER - UNIT 2								
B	2 CYBER 70 COUPLER - UNIT 2								
A	2 CYBER 70 COUPLER - UNIT 1								
AA	2 CYBER 70 COUPLER - UNIT 1								
AB	2 CYBER 70 COUPLER - UNIT 1								

ASSEMBLY PARTS LIST

88916500		P	I	A	STAOPS 65K MOS MP17	DS	MP17	10/22/75	022294	07/22/83	MF				
ASSEMBLY NUMBER		REV	CL	REV	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER				
P/N	REV	PART NUMBER			QUANTITY	UNIT	PART DESCRIPTION		IN/OUT	STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	NAME/ID	PC	N
11	D	88878500			1.00	PC	PWA-MAINTENANCE PANEL (7EGT)		IN				AYP4	N	
13	A	88879780			1.00	PC	CABLE ASSY-IC, FOR FUTURE USE		OUT	014493	051276	051276	PPP4	N	
13	A	88879721			1.00	PC	CABLE ASSY-IC, 24 COND, TWO CONN		IN	014493	051276	051276	PPP4	N	
8	C	88894000			1.00	PC	PWA-2K RAM MICRO MEMORY (B2)		IN				AYH4	N	
15	A	88894300			1.00	PC	CABLE, I/O-TELETYPE (MP17)		IN				AYH4	N	
14	A	88894400			1.00	PC	CABLE, I/O-CRT (MP17)		IN				AYH4	N	
5	D	88909100			1.00	PC	PWA-STATUS MODE INTERRUPT (7EHT)		IN				AYP4	N	
12	D	88909300			1.00	PC	PWA-PANEL INTERFACE (7EJT)		OUT	021059	110376	110376	AYD4	N	
3	D	88909400			1.00	PC	PWA-CONTROL NO. 2 (7EKT)		IN				AYP4	N	
2	D	88909600			1.00	PC	PWA-CONTROL NO. 1		OUT	014708	051677	051677	AYD4	N	
0	A	88909700			1.00	PC	PWA-I/O TTY (R3) (315-0532524)		OUT	014242	101676	101676	AYD4	N	
0	A	88909701			1.00	PC	PWA-I/O TTY (R3) (315-0536972)		IN	014242	101676	101676	AYD4	N	
0	A	88909701			1.00	PC	PWA-I/O TTY (R3) (315-0536972)		OUT	014572	100176	100176	AYH4	N	
10	A	88910100			1.00	PC	PWA-1700 W/ROM (R3) (315-0533032)		OUT	014241	101575	101575	PPP4	N	
10	D	88910101			1.00	PC	PWA-1700 XFORM W/ROM (VERS B1)		IN	014241	101575	101575	AYH4	N	
10	D	88910101			1.00	PC	PWA-1700 XFORM W/ROM (VERS B1)		OUT	014356	020176	020176	AYH4	N	
4	A	88910200			1.00	PC	PWA-CPU W/EL 1 (R3) (315-0533030)		OUT	014240	101375	101375	PPP4	N	
4	D	88910201			1.00	PC	PWA-CPU ARITH FILE 1 (7ELT)		IN	014240	101375	101375	AYP4	N	
1	A	88914100			1.00	PC	CABINET ASSY-MOS MEM-STAOPS		IN				AYP4	N	
7	D	96742600			1.00	PC	PWA-MOS MEM ADDRESS/CONTL 5XAT		OUT	014616	100876	100876	AYH4	N	
6	D	96742600			1.00	PC	PWA-MOS MEM INTFC (DATA) 5XBT		OUT	014404	032276	032276	AYH4	N	
6	D	96742730			1.00	PC	PWA-MOS MEM I/F (DATA) 6ZET		IN	014404	032276	032276	AYH4	N	
6	D	96742730			1.00	PC	PWA-MOS MEM I/F (DATA) 6ZET		OUT	014741	070177	070177	AYH4	N	
0	D	96744241			1.00	PC	PWA-INTERNAL I/O TTY (7EHT)		IN	014572	100176	100176	AYD4	N	
0	D	96744241			1.00	PC	PWA-INTERNAL I/O TTY (7EHT)		OUT	021059	110376	110376	AYD4	N	
2	D	96751017			1.00	PC	PWA-CONTROL NO. 1 7ERT		IN	014060	001677	001677	AYH4	N	
2	D	96751017			1.00	PC	PWA-CONTROL NO. 1 7ERT		OUT	021074	001678	001678	AYH4	N	
10	D	96751046			1.00	PC	PWA-1700 TRANSFORM W/ROM 7FCT		IN	014951	091677	091677	AYH4	N	
6	D	96752104			1.00	PC	PWA-MOS MEM I/F DATA 7FWT		IN	014982	111877	111877	AYP4	N	
7	D	96752107			1.00	PC	PWA-MOS MEM I/F ADDR 7EXT		IN	014982	111877	111877	AYH4	N	
7	D	96752107			1.00	PC	PWA-MOS MEM I/F ADDR 7EXT		OUT	014493	112177	112177	AYH4	N	
2	D	96752114			1.00	PC	PWA-CONTROL NO. 1 7FZT		IN	021076	091578	091578	AYP4	N	
7	D	96752170			1.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVT		IN	021076	031778	031778	AYD4	N	
7	D	96752170			1.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVT		OUT	022147	102562	102562	AYH4	N	
12	D	96752176			1.00	PC	PWA-PANEL INTERFACE 8GXT		IN	021059	110376	110376	AYM4	N	
9	D	96752182			1.00	PC	PWA-INTERNAL, I/O TTY 8GZT		IN	021059	110376	110376	AYP4	N	

INACTIVE

INACTIVE

ASSEMBLY PARTS LIST

INACTIVE

R8916500	P	I	A	STAOPS 65K MOS MP17	DS	MP17	10/22/75	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	REV	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT	STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	NAME/ID	PC	N
10	D	96753001	1.00	PC	PWA-1700 TRANSFORM W/ROM (VERS C)	IN	014356	020176	020176	AYH4	N	
10	D	96753001	1.00	PC	PWA-1700 TRANSFORM W/ROM (VERS C)	OUT	014761	070177	070177	AYH4	N	
7	D	96753017	1.00	PC	PWA-MOS MEM ADDRESS 6AXT	IN	014616	100876	100876	AYH4	N	
7	D	96753017	1.00	PC	PWA-MOS MEM ADDRESS 6AXT	OUT	014761	070177	070177	AYH4	N	
2	D	96753055	1.00	PC	PWA-CONTROL NO.1 6BNT	IN	014708	051677	051677	AYH4	N	
2	D	96753055	1.00	PC	PWA-CONTROL NO.1 6BNT	OUT	014950	091677	091677	AYH4	N	
10	D	96753093	1.00	PC	PWA-1700 TRANSFORM ROM 6CCT	IN	014761	070177	070177	AYH4	N	
10	D	96753093	1.00	PC	PWA-1700 TRANSFORM ROM 6CCT	OUT	014951	091677	091677	AYH4	N	
6	D	96753095	1.00	PC	PWA-MOS MEM I/F (DATA) 6CHT	IN	014761	070177	070177	AYH4	N	
6	D	96753095	1.00	PC	PWA-MOS MEM I/F (DATA) 6CHT	OUT	014982	111877	111877	AYH4	N	
7	D	96753097	1.00	PC	PWA-MOS MEM ADDRESS (6GJT)	IN	014761	070177	070177	AYH4	N	
7	D	96753097	1.00	PC	PWA-MOS MEM ADDRESS (6GJT)	OUT	014982	111877	111877	AYH4	N	
7	D	96754583	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 7DXT	IN	014982	112177	112177	AYH4	N	
7	D	96754583	1.00	PC	PWA-MOS MEM I/F ADDR/CONT 7DXT	OUT	021078	031778	031778	AYH4	N	
16	A	96762000	1.00	PC	MOS ARRAY ADDRESS CONNECTOR	IN				AYH4	N	
7	D	96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	IN	022147	102562	102562		N	
7	D	96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	OUT	022294	072283	072283		N	
7	D	96890552	1.00	PC	PWA-MEMORY I/F ADDRESS 83RNT	IN	022294	072283	072283		N	

NUMBER OF LINE ITEMS = 54
HIGHEST FIND NUMBER = 16

INACTIVE

NUMBER OF LINE ITEMS = 54
HIGHEST FIND NUMBER = 16

Figure 3-12. AA133-A Communication Controller (88916500) (Sheet 2 of 3)

DWN		CONTROL DATA SMALL COMPUTER DEVELOPMENT DIVISION CODE IDENT 09132	TITLE		PREFIX	DOCUMENT NO.	REV
CHKD	STAOPS 65K MOS ASSY			88916500	P		
ENG	FIRST USED ON						
MFG							
APPR							

SHEET REVISION STATUS															REVISION RECORD				
REV	ECO	DESCRIPTION										DRFT	DATE	APP					
A	14493	CL. A. RELEASED										DL	5-27-76	AP					
B	14572	SEE ECO										DL	7-7-76	AP					
C	14616	SEE ECO										DL	11-15-76	AP					
D	DS14708	F/N 2 WAS 88909600										JM	6-13-77	AW					
E	DS14761	CHANGED F/N 6,7 & 10										DL	7-13-77	AW					
F	DS14950	F/N 2 WAS 96753855										LP	9-28-77	AW					
G	DS14951	SEE ECO										AT	10-3-77	LP					
H	DS14982	SEE ECO										AT	12-14-77	LP					
J	DS21020	INACTIVE SUPER-SEDED BY NONE										DL	1-11-78	AW					
K	DS21073	REVISION UPDATE										AT	4-24-78	AW					
L	DS21076	P/L CHG										DL	6-15-78	AW					
M	DS21059	CHG P/L - F/N 9 & 12										DL	10-12-78	AW					
N	DS22187	SEE ECO										JVM	8-20-82	AW					
P	DS22294	P/L CHG ONLY										DL	7-27-83	AW					

NOTES:

DETACHED LISTS

Figure 3-12. AA133-A Communication Controller (88916500) (Sheet 3 of 3)

LA JOLLA SYSTEMS DIVISION La Jolla, Calif. 92037		CODE IDENT 09132		DOCUMENT NO 96751124		REV T	
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1	AT275-B/AT241-B OR DT223-B	16K/32K MOS MEM ARRAY OR ECC ARRAY	A
2	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Z
3	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Y
4	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	X
	BASIC PROCESSOR	MOS MEM INTERFACE ADDRESS	E
	BASIC PROCESSOR	MOS MEM INTERFACE DATA	V
5	FC402-A	BREAK POINT CONTROLLER	C
	BASIC PROCESSOR	2K W READ/WRITE RAM MICRO MEMORY	T
6		SPECIAL ALGOR UNIT W/BCD	S
	BASIC PROCESSOR	1700 TRANSFORM W/BCD	R
		CONTROL 1	P
		CONTROL 2	N
		ALL W/FILE 1	M
		UNIT	L
	BASIC PROCESSOR	I/O TTY INTERFACE	K
7	FH301-A	(AQ) CE/LP CONT	J
8	FA104-A	(AQ-DMA) CAS TAPE CONT	H
		MLIA UNIT-PWA 3	G
9	DY192-A	MLIA UNIT-PWA 2	F
		MLIA UNIT-PWA 1	E
10		CBR 70 CPLR UNIT 2	D
11		UNIT 2	C
		UNIT 2	B
		UNIT 1	A
		UNIT 1	AA
12		CBR 70 CPLR UNIT 1	AB

PROCESSOR CARD PLACEMENT CPU II

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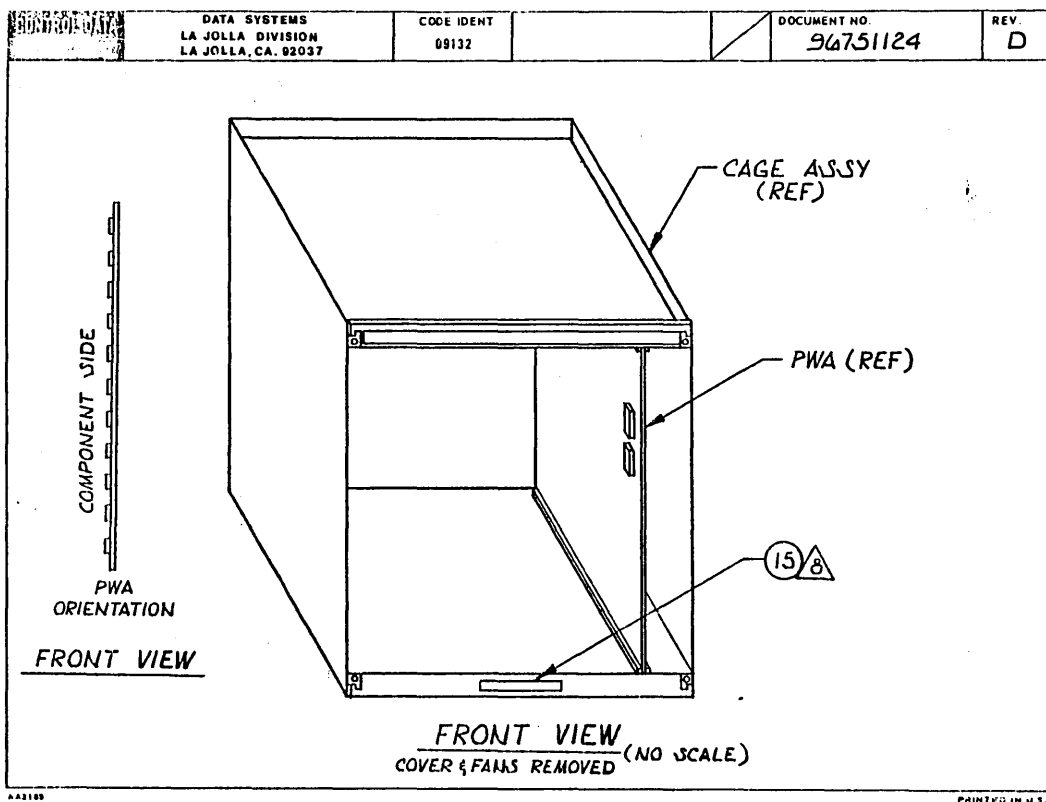
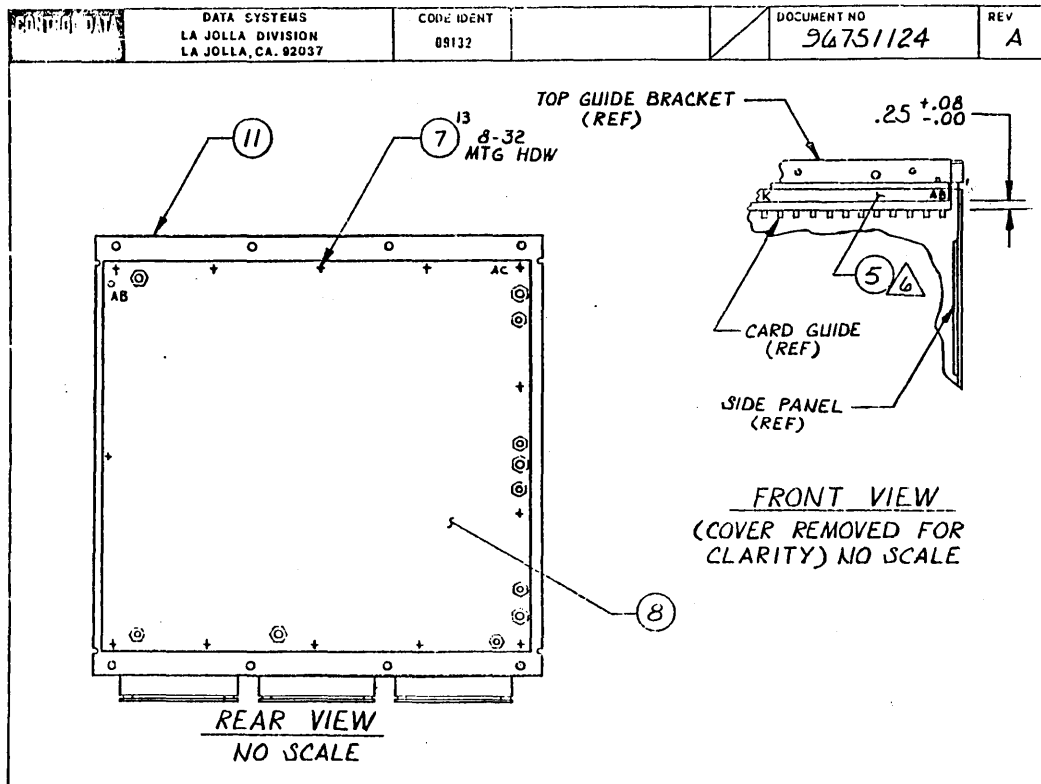


Figure 3-13. AA133-B Communication Control Processor (Sheet 2 of 4)

ASSEMBLY PARTS LIST

96751124	U	A	A	COMM CONTROL PROCESSOR	DSH	AA133B	04/24/77	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	NAME/INT PART TYPE	PN OR N
1	D	88909100	1.00	PC	PWA-STATUS MODE INTERRUPT(7EHT)	IN			AYP4	N
2	D	88909400	1.00	PC	PWA-CONTROL NO.2 (7EKT)	IN			AYP4	N
3	D	88910201	1.00	PC	PWA-CPU ARITH FILE 1 (7ELT)	IN			AYP4	N
10	A	96720404	1.00	PC	PWA-1700 XFORM W/HCD HKFT	IN	021644	072779	AYP4	N
11	D	96735700	1.00	PC	PWA-1700 XFORM W/HCD (7OUT)	IN	021645	010670	AYP4	N
16	D	96735700	1.00	PC	PWA-1700 XFORM W/HCD (7OUT)	OUT	021644	031770	AYP4	N
19	D	96735700	1.00	PC	PWA-1700 XFORM W/HCD (7OUT)	IN	031100	070170	AYP4	N
19	D	96735700	1.00	PC	PWA-1700 XFORM W/HCD (7OUT)	OUT	021110	003370	AYP4	N
4	D	96742600	1.00	PC	PWA-2K RAM MICROMEM W/PAH 5XNT	IN			AY14	N
5	C	96744112	1.00	PC	LABEL IDENT.26 POS BACK PANEL	IN			PPP4	N
6	D	96744241	1.00	PC	PWA-INTERNAL I/O TTY (7EHT)	OUT	021650	110370	AYP4	N
7	A	96744973	13.00	PC	SCREW-THD ROLL 8-32 3/8 LG	IN			PPP3	N
8	A	96749712	1.00	PC	WIRED PANEL ASSY-COMM CONT PRC	IN			AYC4	N
9	D	96751017	1.00	PC	PWA-CONTROL NO.1 7EPT	OUT	021176	091570	AYP4	N
10	D	96751046	1.00	PC	PWA-1700 TRANSFORM W/HROM 7EFT	OUT	011504	111177	AYP4	N
10	D	96751081	1.00	PC	PWA-1700 XFORM W/HCD (7EPT)	IN	011504	111177	AYP4	N
10	D	96751081	1.00	PC	PWA-1700 XFORM W/HCD (7EPT)	OUT	021036	010670	AYP4	N
11	D	96751180	1.00	PC	CAGE ASSY-PROCESSOR WITH FANS	IN			AY14	N
12	D	96752104	1.00	PC	PWA-MOS MEM I/F DATA 7EHT	IN	011504	111177	AYP4	N
12	D	96752104	1.00	PC	PWA-MOS MEM I/F DATA 7EHT	OUT	022172	032302	AYP4	N
9	D	96752114	1.00	PC	PWA-CONTROL NO.1 7EFT	IN	021076	091570	AYP4	N
12	D	96752170	1.00	PC	PWA-MOS MEM I/F ADDR/COUNT 8CVT	IN	021377	103070	AYP4	N
13	D	96752170	1.00	PC	PWA-MOS MEM I/F ADDR/COUNT 8CVT	OUT	022127	102301	AYP4	N
6	D	96752182	1.00	PC	PWA-INTERNAL I/O TTY 8GZT	IN	021059	110370	AYP4	N
15	A	96752283	1.00	PC	LABEL-CAUTION (PWAS NOT KEYED)	IN	021045	011170	PPP4	N
10	D	96752604	1.00	PC	PWA-1700 XFORM W/HCD 6HFT	IN	021104	031770	AYP4	N
10	D	96752604	1.00	PC	PWA-1700 XFORM W/HCD 6HFT	OUT	021120	070170	AYP4	N
12	D	96753095	1.00	PC	PWA-MOS MEM I/F (DATA) 6GHT	OUT	011504	111177	AYP4	N
13	D	96764563	1.00	PC	PWA-MOS MEM I/F ADDR/COUNT 70TT	OUT	021527	103070	AYP4	N
14	A	96762000	1.00	PC	MOS ARRAY ADDRESS CONNECTOR	IN			AY14	N
10	D	96807727	1.00	PC	PWA-1700 XFORM W/HCD 4JCT	IN	021710	002270	AYP4	N
10	D	96807727	1.00	PC	PWA-1700 XFORM W/HCD 4JCT	OUT	021710	072770	AYP4	N
12	D	96890065	1.00	PC	PW ASSY-MOS MEMORY INTF (DATA)	IN	022172	132302		N
13	D	96890552	1.00	PC	PWA-MEMORY I/F ADDRESS 81HNT	IN	022127	102301		N
13	D	96890550	1.00	PC	PWA-MEMORY I/F ADDRESS 81HNT	OUT	022127	102301		N
13	D	96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	IN	022127	102302		N

ASSEMBLY REV 100

MFG INFO

INTERDIVISIONAL DOCUMENT

ASSEMBLY PARTS LIST

96751124	U	A	A	COMM CONTROL PROCESSOR	DSH	AA133B	04/24/77	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	SW	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER

FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT MEAS.	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	NAME/INT PART TYPE	PN OR N
13	D	96890551	1.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	OUT	022294	072283		N
13	D	96890552	1.00	PC	PWA-MEMORY I/F ADDRESS 83RNT	IN	022294	072283		N

DWN		CONTROL DATA SMALL COMPUTER MILITARY DIVISION CODE IDENT 09132	TITLE	COMM CONTROLLER PROC	PREFIX	DOCUMENT NO.	96751124	REV	U
CHKD			FIRST USED ON	CYBER 18					
ENG									
MFG									
APPD									

SHEET REVISION STATUS										REVISION RECORD					
REV	ECO	DESCRIPTION								DRFT	DATE	APP			
A	DS18770	CL A. RELEASED								DR	9-26-77	AW			
B	DS14994	F/N 10 WAS 96751046 F/N 12 WAS 96753895								JM	11-16-77	AW			
C	DS21035	CHG NOTE 7 & P/L								DR	1-19-78	AW			
D	DS21045	SEE ECO								JM	2-16-78	AW			
E	DS21084	SEE ECO								DL	3-29-78	AW			
F	DS21120	F/N 10 WAS 96752404								JM	4-21-78	AW			
G	DS21083	REVISION UPDATE								JSH	6-8-78	AW			
H	DS21076	P/L CHG								DR	6-15-78	AW			
J	DS21210	REMOVED NOTE 7, CHG								DR	9-28-78	AW			
K	DS21659	F/N 6 WAS 96744241								DR	10-13-78	AW			
L	DS21327	P/L CHG ONLY								JSH	11-2-78	AW			
M	DS21395	SEE ECO								BR	6-6-79	AW			
N	DS21664	EFFECTIVITY CHANGE								JSH	7-16-79	AW			
P	DS22127	ADD'D NOTE 3 & CHG P/L								BR	11-4-81	AW			
R	DS22172	P/L CHG								BR	4-5-82	AW			
T	DS22187	SEE ECO								JW	8-23-82	AW			
U	DS22294	P/L CHG ONLY								JW	7-29-83	AW			

NOTES:

DETACHED LISTS

Figure 3-13. AA133-B Communication Control Processor (Sheet 4 of 4)

REVISION RECORD						
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
A	DS19141	CL. A. RELEASED	JM	6-27-79	<i>[Signature]</i>	AW
B	DS21676	F/N 7 WAS 96752111	RK	10-3-79	<i>[Signature]</i>	AW
C	DS22127	ADD'D NOTE 64 CHG P/L	BR	11-0-81	<i>[Signature]</i>	AW
D	DS22172	SEE ECO	BR	4-5-82	<i>[Signature]</i>	AW
E	DS22187	SEE ECO	JVM	8-20-82	<i>[Signature]</i>	AW
F	DS22172A	P/L CHG ONLY	JVM	10-26-82	<i>[Signature]</i>	AW
G	DS22234	SEE ECO	JVM	7-29-83	<i>[Signature]</i>	AW

INTER-DIVISIONAL DOCUMENT Changes to this document require approval of all Using Divisions per CDC-STD 1.01.024.	DWN	<i>[Signature]</i>	3-29-79	DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	TITLE	PWA KIT - 18-25 PROCESSOR	
	CHKD	<i>[Signature]</i>	5-1-79		CODE IDENT	09132	
	ENG	<i>[Signature]</i>	4-30-79		DWG No	96720752	
	MFG	<i>[Signature]</i>	6-5-79		SCALE		
	APP	<i>[Signature]</i>	6-27-79				
						96720765	

DATA SYSTEMS LA JOLLA DIVISION LA JOLLA, CA. 92037	CODE IDENT 09132		DOCUMENT NO. 96720752	REV E
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NOTES:

- ① OPTIONAL ADD-ON EQUIPMENTS THAT ARE NOT SUPPLIED AS PART OF THE BASIC PROCESSOR.
- ② ASSEMBLY NOT SUPPLIED AS PART OF THE BASIC PROCESSOR. RESERVED FOR 255X PRODUCT LINE APPLICATION.
- ③ OPTIONAL ADD-ON EQUIPMENT SLOTS-EQUIPMENT TYPES UNASSIGNED.
- ④ RESERVED FOR FUTURE PERIPHERAL CONTROLLER DESIGNS. POWER INPUTS ARE +5VDC, ± 12 VDC AND GND.
- ⑤ MLTA EQUIPMENT NOT SUPPLIED AS PART OF THE BASIC PROCESSOR. EQUIPMENT APPLICATION UTILIZED BY THE CYBER 18-25 PROCESSOR AND 255X PRODUCT LINES. EQUIPMENT IDENTIFIED AS DY192-A CYBER 18 APPLICATION ONLY.

Figure 3-14. AA153-A Processor PWA Kit (Sheet 1 of 3)

AA/53-A CARD PLACEMENT

△	AT275-B/AT241-B OR DT223-B	16K/32K MOS MEM ARRAY OR ECC ARRAY	AC
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Z
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Y
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	X
	90890552	MOS MEM I/F ADDR	W
	90890065	MOS MEM I/F DATA	V
△	FC402-A	BREAKPOINT CONTROL	U
	90742600	2K RAM MICRO MEM W/PARITY	T
△		SPECIAL ALGOR UNIT	S
	90720404	1700 TRANSFORM W/BCD	R
	90752114	CONTROL NO. 1	P
	88909400	CONTROL NO. 2	N
	88910201	ARITH W/FILE 1	M
	88909100	STATUS MODE INTRPT	L
	90752182	I/O TTY INTERFACE	K
△	FH301-A	(AQ) CR/LP CONTROL	J
	90752111	(AQ) FLEX DISK DR	H
△	DY192-A	MLIA UNIT-PWA NO.3	G
△	DY192-A	MLIA UNIT-PWA NO. 2	F
△	DY192-A	MLIA UNIT-PWA NO. 1	E
△		CBR TO CPLR UNIT 2	D
△		UNIT 2	C
△		UNIT 2	B
△		UNIT 1	A
△		UNIT 1	AA
△		CBR TO CPLR UNIT 1	AB

CPU I (MOS BASIC)

AA/53-A CARD PLACEMENT

△	AT275-B/AT241-B OR DT223-B	16K/32K MOS MEM ARRAY OR ECC ARRAY	AC
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Z
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	Y
△	AT275-B/AT241-B	16K/32K MOS MEM ARRAY	X
	90890552	MOS MEM I/F ADDR	W
	90890065	MOS MEM I/F DATA	V
△	FC402-A	BREAKPOINT CONTROL	U
	90742600	2K RAM MICRO MEM W/PARITY	T
△		SPECIAL ALGOR UNIT	S
	90720404	1700 TRANSFORM W/BCD	R
	90752114	CONTROL NO. 1	P
	88909400	CONTROL NO. 2	N
	88910201	ARITH W/FILE 1	M
	88909100	STATUS MODE INTRPT	L
	90752182	I/O TTY INTERFACE	K
△	FH301-A	(AQ) CR/LP CONTROL	J
	90752111	(AQ) FLEX DISK DR	H
△	DY192-A	MLIA UNIT-PWA NO.3	G
△	DY192-A	MLIA UNIT-PWA NO. 2	F
△	DY192-A	MLIA UNIT-PWA NO. 1	E
△		CBR TO CPLR UNIT 2	D
△		UNIT 2	C
△		UNIT 2	B
△		UNIT 1	A
△		UNIT 1	AA
△		CBR TO CPLR UNIT 1	AB

CPU II (COMM CONTROL)

Figure 3-14. AA/53-A Processor PWA Kit (Sheet 2 of 3)

ASSEMBLY PARTS LIST

96720752						G	A	A	PWA KIT		DSM	AA153A	06/23/79	022294	07/22/83	HF
ASSEMBLY NUMBER		REV	CL	OR	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST USAGE	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER					
FIND NUMBER	REV	PART NUMBER			QUANTITY	UNIT MEAS.	PART DESCRIPTION		IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	NAME/OUT PART TYPE	PN NO	REV		
1	D	88909100			2.00	PC	PWA-STATUS MODE INTERRUPT(7EHT)		IN			AYP4	N			
2	D	88909400			2.00	PC	PWA-CONTROL NO.2 (7EKT)		IN			AYP4	N			
3	D	88910201			2.00	PC	PWA-CPU ARITH FILE 1 (7ELT)		IN			AYP4	N			
4	A	96720404			2.00	PC	PWA-1700 XFORM W/BCD 8KFT		IN			AYP4	N			
5	D	96742600			2.00	PC	PWA-2K RAM MICROMEM W/PAR 5XNT		IN			AYM4	N			
6	D	96752104			2.00	PC	PWA-MOS MEM I/F DATA 7EHT		OUT	022172	072282	AYP4	N			
7	D	96752111			2.00	PC	PWA-FDD INTERFACE 7GNT		OUT	021676	092670	AYP4	N			
8	D	96752114			2.00	PC	PWA-CONTROL NO.1 7FZT		IN			AYP4	N			
9	D	96752178			2.00	PC	PWA-MOS MEM I/F ADDR/CONT 8GVT		OUT	022127	100301	AYP4	N			
10	D	96752182			2.00	PC	PWA-INTERNAL I/O TTY 8GZT		IN			AYP4	N			
7	A	96870860			2.00	PC	PWA-FDD I/F 9KST		IN	021676	092679	AYP4	N			
6	D	96890065			2.00	PC	PW ASSY-MOS MEMORY INTF (DATA)		IN	022172	101982		N			
9	D	96890550			2.00	PC	PWA-MEMORY I/F ADDRESS 81HVT		IN	022127	100301		N			
9	D	96890550			2.00	PC	PWA-MEMORY I/F ADDRESS 81HVT		OUT	022167	102582		N			
9	D	96890551			2.00	PC	PWA-MEMORY I/F ADDRESS 81PUT		IN	022107	102582		N			
9	D	96890551			2.00	PC	PWA-MEMORY I/F ADDRESS 81PUT		OUT	022294	072283		N			
9	D	96890552			2.00	PC	PWA-MEMORY I/F ADDRESS 83RNT		IN	022294	072283		N			
NUMHFR OF LINE ITEMS = 17																
HIGHEST FIND NUMBER = 10																

Figure 3-14. AA153-A Processor PWA Kit (Sheet 3 of 3)

CONTROL DATA		LA JOLLA SYSTEMS DIVISION La Jolla, Calif. 92037	CODE IDENT 09132	DOCUMENT NO 96743931	REV G
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AA155-B CARD PLACEMENT

Δ	AT 275-B/AT 241-B	16K/32K MOS MEM ARRAY	Z	16K/32K MOS MEM ARRAY	Y	16K/32K MOS MEM ARRAY	X	16K/32K MOS MEM ARRAY	W	MOS MEM I/F ADDR	V	MOS MEM I/F DATA	U	BREAKPOINT CONTROL	T	ZK 241N MICRO MEM W/PARTY	S	512/1K/2K W/READ/WRITE	R	1700 TRANSFORMER W/BCD	P	CONTROL NO. 1	N	CONTROL NO. 2	M	ARITH W/FILE 1	L	STATUS MODE INTERRUPT	K	I/O TTY INTERFACE	J	(A/Q) ECLA EXPANSION	H	(A/Q-DMA) ECLA	G	(A/Q-DMA) SDLC	F	(A/Q) BCCLA	E	(A/Q)	D	(A/Q-DMA) FDD ADAPT	C	(A/Q)	B	(OPEN) ECLA EXPANSION	A	(A/Q-DMA) ECLA, DMA EXP	AA	(A/Q) A/Q EXP	AB	(SET/SAVE)
Δ	AT 275-B/AT 241-B	16K/32K MOS MEM ARRAY	Δ	AT 275-B/AT 241-B	Δ	AT 275-B/AT 241-B	Δ	AT 275-B/AT 241-B	Δ	96890552	Δ	96890065	Δ	FC402-A	Δ	BA210-B	Δ	BA209-A/BA210-B	Δ	96720404	Δ	96752114	Δ	88909400	Δ	88910201	Δ	88909100	Δ	96752182	Δ	FJ128-A	Δ	FJ127-A	Δ	FJ129-A	Δ	FJ442-A	Δ		Δ	968708160	Δ	FJ128-A	Δ	FJ127-A	Δ		Δ			

CPU II (MOS BASIC)



ASSEMBLY PARTS LIST

96743931		G	A	PWA KIT-DUAL BASIC PROCESSOR		DSM	AA155B	05/20/80	022294	07/22/83	MF
ASSEMBLY NUMBER	REV	CL	SW	SS	ASSEMBLY DESCRIPTION	DESIGN SOURCE	FIRST YEAR	RELEASE DATE	CHANGE ORD. NUMBER	PROCESSING DATE	PAGE NUMBER
FIND NUMBER	REV	PART NUMBER	QUANTITY	UNIT	PART DESCRIPTION	IN/OUT STATUS	CHANGE ORD. NUMBER	DATE EFFECTIVE	REASON FOR PART TYPE	PN	IN
1	D	88909100	2.00	PC	PWA-STATUS MODE INTERRUPT (7EHT)	IN				AYP4	N
2	D	88909400	2.00	PC	PWA-CONTROL NO.2 (7EKT)	IN				AYP4	N
3	D	88910201	2.00	PC	PWA-CPU ARITH FILE 1 (7ELT)	IN				AYP4	N
4	A	96720404	2.00	PC	PWA-1700 XFORM W/BCD 8KFT	IN				AYP4	N
5	D	96752182	2.00	PC	PWA-MOS-MEM I/F DATA-7EHT	OUT	022172	032382		AYP4	N
6	D	96752114	2.00	PC	PWA-CONTROL NO.1 7EFT	IN				AYP4	N
7	D	96752170	2.00	PC	PWA-MOS-MEM I/F ADDR/CONT 8EHT	OUT	022127	102381		AYP4	N
8	D	96752182	2.00	PC	PWA-INTERNAL, I/O TTY 8GZT	IN				AYP4	N
9	A	96870860	2.00	PC	PWA-FDD I/F 9KST	IN				AYP4	N
5	D	96890065	2.00	PC	PW ASSY-MOS MEMORY INTF (DATA)	IN	022172	101982		AYP4	N
7	D	96890550	2.00	PC	PWA-MEMORY I/F ADDRESS 81NXT	IN	022127	102381			N
7	D	96890550	2.00	PC	PWA-MEMORY I/F ADDRESS 81NXT	OUT	022187	102582			N
7	D	96890551	2.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	IN	022187	102582			N
7	D	96890551	2.00	PC	PWA-MEMORY I/F ADDRESS 81PUT	OUT	022294	072283			N
7	D	96890552	2.00	PC	PWA-MEMORY I/F ADDRESS 83RNT	IN	022294	072283			N

NUMBER OF LINE ITEMS = 15
HIGHEST FIND NUMBER = 9

SCMD

MFG INFO

INTERDIVISIONAL DOCUMENT

Figure 3-16. AA155-B Processor PWA Kit (Sheet 2 of 2)